



COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION

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August 1, 2023

The Honorable Barry D. Knight, Chair
House Appropriations Committee
1852 Mill Landing Road
Virginia Beach, VA 23457

The Honorable John G. Avoli, Vice Chair
House Education Committee
P.O. Box 1942
Staunton, VA 24402

The Honorable Janet D. Howell, Chair
Senate Finance and Appropriations
P.O. Box 2608
Reston, VA 20195-0608

The Honorable L. Louise Lucas, Chair
Senate Education and Health Committee
P.O. Box 700
Portsmouth, VA 23705

Dear Delegates Knight and Avoli and Senators Howell and Lucas,

We are pleased to submit the report "A Study of Virginia's Academic Year Governor's Schools Program" enclosed.

The purpose of this report was to inform the Virginia Department of Education regarding the potential development of additional successful Academic Year Governor's School options to increase access for the students of the Commonwealth of Virginia, in accordance with Budgetary Requirements of [Item 129 T](#). of the Budget Amendments to the 2022 Virginia State Budget, which states:

"T. Out of this appropriation, \$200,000 the first year from the general fund is provided to the Department of Education to study options to expand student access to Academic Year Governor's Schools. In such study, the Department shall consider the need and demand for additional Academic Year Governor's Schools slots and programs, regional access to slots and programs, whether virtual resources through the Department of Education could be better leveraged to expand access to Governor's School courses, and potential costs and timelines for implementation. The Department of Education shall report its findings to the Chairs of the House Committee on Education, the Senate Committee on Education and Health, the House Committee on Appropriations, and the Senate Committee on Finance and Appropriations no later than August 1, 2023."

The Virginia Department of Education contracted with the Center for Gifted Education, which is a program of the College of William and Mary, to undertake this study and inform recommendations to expand student access to Academic Year Governor's Schools. The attached report submitted by the Center for Gifted Education includes foci, including:

- Establishing the distinguishing advantage of a Academic Year Governor's Schools as a community of learners
- The needs of existing Academic Year Governor's Schools
- The appropriateness of a universal approach to Academic Year Governor's Schools
- The existing levels of support at/ for current Academic Year Governor's Schools
- The need and demand for additional Academic Year Governor's Schools programs, including access and regional diversity in the Commonwealth's eight Superintendent regions.
- The need and demand for additional slots at existing Academic Year Governor's School programs.
- The potential costs and timelines for implementation of new Academic Year Governor's School programs.
- The areas of focus provided in the varying models of Academic Year Governor's Schools and the potential demand for additional areas of focus.
- The environments that support students in varying models of Academic Year Governor's Schools (Full Day, Shared-time, Virtual, or Residential)
- Whether virtual resources through the Department of Education could be better leveraged to expand access to Academic Year Governor's School courses.

The report provides recommendations for the General Assembly and the Department of education to consider for implantation to support expanded access to Academic Year Governor's School programs.

If you have further questions concerning this report, please contact Amanda Nevetral, Director, Office of Advanced Learning, (804) 225-2884, Amanda.Nevetral@doe.virginia.gov

Sincerely,



Lisa Coons

LC/BA/an

cc: The Honorable Glenn Youngkin
The Honorable Aimee Guidera
Virginia Board of Education

A Study of Virginia's Academic Year Governor's Schools Program

June 15, 2023

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This report was produced at the request of the Virginia Department of Education in August, 2022.

Acknowledgement

We would like to acknowledge the outstanding work of graduate assistants from William & Mary and James Madison University, whose contributions significantly enhanced our understanding of Virginia's Academic Year Governor's Schools: Emily Shirai, Diamond Torres, Yenni Gia-Yen Tran, Kristina Wolf, Hannah Yelanich, and Jordan Zapp. We would also like to thank our consultants, Donna L. Poland and Joy Lawson Davis, who provided valuable information and support for the project.

Executive Summary

A Study of Virginia’s Academic Year Governor’s Schools Program

Introduction

The Academic Year Governor’s Schools (AYGS) in Virginia are a flagship initiative within Virginia’s menu of options for advanced learners. The first four AYGS programs were established in 1985, following a decade of service by summer Governor’s Schools at three sites (Stith, 2017). Since then, the field has grown to 19 AYGS programs, across a wide variety of formats and curricula (VDOE, 2022). These schools represent the highest rigor and selectivity in the portfolio of advanced options in the Commonwealth.

The AYGS model as it is currently operated meets many standards of excellence as articulated in scholarship on advanced academics. There is, however, always room for growth, both figurative and literal. This study of Virginia Academic Year Governor’s Schools, therefore, is both timely and responsible. For this study, researchers interviewed each of the 19 AYGS directors, as well as a sample of program alumni and regional board chairs, looking for recommended practices and obstacles to program access. In addition, the authors deployed a survey that garnered nearly 1,200 responses from students, parents, school employees and administrators, school board members, and members of the community.

This Executive Summary is intended as a snapshot of the comprehensive report. It is offered in three sections. The first concisely addresses the meaningful themes and concerns that emerged over the course of the study. These are what the authors believe to be the most powerful points of leverage for improving service and access. The second section offers specific answers to the research questions originally articulated by the Virginia Department of Education in their request for this research. The final section is a reduced list of concrete recommendations from the research team, by way of addressing the issues raised in the first sections, and further explicated in the comprehensive report.

Broader Themes

The guiding documents for this study of AYGS in Virginia posited seven specific questions, and those questions are directly addressed in the third section of this executive summary. In pursuit of those questions, however, several cross-categorical themes emerged from the data. These themes are offered here as important context.

The Distinguishing Advantage of a Governor’s School is the Community of Learners

A consistent theme among most respondents was the value of an AYGS education beyond the advanced coursework being delivered. While AYGS programs are essential in providing such coursework for divisions with fewer resources, this benefit was considerably

overshadowed by the stakeholder focus on bringing these learners together as a critical outcome. In addition to training students in universal skills and dispositions, such as collaboration and critical thought, there was a consistent emphasis on the value of the AYGS as a *community of learners*. Stakeholders frequently provided a picture of safe community and mutual identity for students who often feel alone in their home schools, which is especially important for adolescent development. This principle is codified in the VDOE protocols for the creation of a Governor's School, and it needs to be a fundamental consideration in the development of new programs and support of existing ones.

Existing Programs Need Attention First

There is broad support across stakeholders for the provision of new AYGS programs in the Commonwealth, and for the funding of more student slots within existing programs. However, there is a complementary awareness in the same stakeholders that existing programs need more adequate support before growing further. Equitable access is not just about increasing the number of available seats; it is also currently impacted by the factors indicated below.

1. *Transportation is a Fundamental Concern*

Transportation issues were indicated in the majority of existing AYGS programs. If there are buses, the travel time and scheduling are often prohibitive for students at a distance. Students often drive themselves, which introduces both risk and an inherent socioeconomic disparity in terms of car availability. These issues might be addressed in several ways, including more funding for buses and more campuses in different parts of the region.

2. *Selection of Participants is a Division Responsibility*

Participating school divisions typically take responsibility for selecting students to participate, and the AYGS serves whichever students it receives. While existing AYGS programs are now required to report on demographic representation in their student body, most of them hold very little power to improve representation due to their absence from the selection process at the division level. Several existing AYGS sites work in tandem with their feeder schools to inform the selection process, allowing them to better identify and select the students who will benefit from their service.

3. *Early Awareness and Talent Development Improve Community Access*

The lack of diversity in Governor's Schools is due, in part, to inadequate talent development opportunities for underserved students in their earlier education. Several directors commented on the need to provide better educational experiences for advanced learners in elementary and middle school, a recommended best practice by scholars in advanced academics. Earlier programming could help diminish readiness gaps in primary grades, improve awareness of

AYGS programming among potential participants, and help inform students on taking courses necessary for admission.

A Universal Approach Will Not Work

All nineteen AYGS programs in Virginia are deeply regional in nature, created across a span of nearly forty years, in a variety of contexts and in response to local community needs. They serve deeply divergent populations in a variety of formats, all of which are, to a great degree, successful in offering appropriate instruction to the students they serve. They range in size from approximately 35 to slightly over 1,800 students, and they teach everything from physical chemistry to modern dance. They are urban, suburban, and rural; full-time and part-time; comprehensive and tightly focused. Across this diversity, the programs were reliably clever and cost-efficient in evaluating and responding to changing student needs, even under their particular financial and logistical constraints.

While the autonomy under which they have operated may have come at the cost of more robust financial support from the Commonwealth, it has resulted in a portfolio of distinct programs with individual strategies for success. As a result of this, it seems probable that any requirement applied wholesale to all AYGS programs is likely to serve some and hinder others, and therefore needs to be carefully considered. All AYGS programs seem bound by broad goals of appropriate education for all students, the development of community among students and staff, and equity of opportunity for a changing society. However, individual programs need to be allowed freedom and support to pursue those goals by discerning regional needs and adapting to local context.

Responses to VDOE Research Questions

Listed below are the research questions provided by the Virginia Department of Education in response to the call by the Virginia General Assembly for “a report to inform the Virginia Department of Education (Department) regarding the potential development of additional successful Academic Year Governor’s School Options to increase access for the students of the Commonwealth of Virginia.”

1. Study the existing levels of support at/ for current Academic Year Governor’s Schools

The AYGS clearly enjoy strong support from their stakeholders. They are seen as valuable and effective programs, providing for the academic needs of the Commonwealth’s high ability students. The data suggest that while there is overall support for AYGS as a valuable option for these students and for their role in supporting advanced academic development, concerns among the stakeholders exist regarding the availability of trained teachers and the provision of resources.

Stakeholders considered the community-building goals of AYGS to be important and those describing their specific schools strongly believed their AYGS was effective in building a community of learners. There were some concerns about the lack of cultural diversity and the need for additional mental health support, especially due to the challenging pedagogy. However, positive feedback was common regarding the AYGS commitment to community building and the resulting positive effect on dealing with academic pressure.

2. Study the need and demand for additional Academic Year Governor's Schools programs, including access and regional diversity in the Commonwealth's eight Superintendent regions

The support for additional AYGS programs was robust, but this result must be seen in the light of the possible interpretations of this question. Several existing AYGS sites have expanded into multiple curricular foci, for example supplementing a historic science track with a new sequence in humanities. Development in this regard was seen by respondents in a very positive light. Directors, alumni, and survey respondents also saw wisdom in developing more campuses within the administrative purview of existing AYGS programs. This sort of development could mitigate transportation concerns and allow for more seats if sufficient funding were present, but the risk of unnecessarily diluting or dividing existing communities of students would need to be managed. The creation of entirely new schools, with new administration and facilities, received mixed comments.

3. Study the need and demand for additional slots at existing Academic Year Governor's School programs

Stakeholders strongly supported additional available slots in existing programs, and they provided a number of necessary considerations when growing programs. The access challenges indicated above in the section on broader themes will reduce the potential benefit of additional slots unless they are addressed. In addition, the majority of existing AYGS programs are currently at or near the full physical capacity, requiring support for additional facilities and faculty. Finally, providing additional slots will only result in greater access if participating divisions are encouraged and empowered to fund more students for participation.

4. Study potential costs and timelines for implementation of new Academic Year Governor's School programs

There is a sense among study participants that the current funding model for existing AYGS programs is inadequate, and that implementation of new programs needs to include the appropriate support of existing programs. This position is supported by the

historic commissioning of two reports, in 2014 and 2016, on potential improvements to the funding system. To avoid propagating existing problems, cost estimates for new programs should not be approximated on the basis of the current funding model.

This being said, there is immediate demand for expansion of service. There are several successful AYGS models in operation (e.g., community college partnership, distributed service to participating schools) that could be ready templates for new sites without requiring the delay and expense of new construction. It is the position of the research team, however, that efforts would preferably be made to stabilize and supplement funding to existing programs before creating new ones. An invitation can then be made to existing directors and regional boards, who can determine the plausibility of increasing the number of students served by their particular schools. If the AYGS funding model were improved, directors seem poised to creatively problem solve an expansion of service.

5. Study the areas of focus provided in the varying models of Academic Year Governor's Schools and the potential demand for additional areas of focus

When discussing the curricular focus, though the participants generally appreciated the focus areas of their respective AYGS programs, there was clearly an expressed desire for additional focus areas or broader curricula to cater to a wider range of student interests. The participants mostly valued the opportunities for advanced learning, and the strong academic foundations provided. However, they also highlighted the importance of diversification of the curricular focus, promoting non-STEM fields, enhancing technical and hands-on learning, and increasing awareness of available choices. Participants noted that the students of their regions often did not have the option for courses that are contemporary with the changing world. These insights emphasize the need for flexibility and diverse offerings to meet the needs and interests of students and communities.

6. Study the environments that support students in varying models of Academic Year Governor's Schools (Full Day, Shared-time, Virtual, or Residential)

The AYGS programs exist in different models. Three are full time, 16 share time with base schools in their region and one of these offers virtual coursework with some in-person meetings. One school, Governor's School for the Arts, shares time with a base school, but students still take a full day of classes at the GS. There are presently no residential AYGS in Virginia. Shared-time models offer reduced costs to operate, student access to core and elective courses and extracurriculars at the base school, and a connection to the student's base school community in addition to their AYGS community of learners. The transportation required for shared-time programs that do not take place in the base school is disruptive, and schedules may interfere with opportunities (academic and social) at either school. Full-time AYGS programs provide all the features of a

traditional school, and students have more time for advanced learning and to build community with other AYGS students and faculty. Travel time for both models may be extreme for students at distant parts of the region served.

Nearly a third of all stakeholders responding supported the idea of all AYGS being full-time, but many felt the shared-time model was best for students. Parents tended to be strongly in favor of full-time options for their children. Students tended to be less in favor of full-time options, due to workload concerns and the loss of their base school community. Virtual options are effective in serving students who live too far from advanced academic opportunities, when there is a lack of qualified teachers in the region, or when enrollment would be too low to support an advanced course. The majority of respondents were opposed to the virtual model of AYGS, citing a lack of rigor, an inability to have hands-on activities, students' inability to learn as effectively as in person, and, primarily, the lack of social interaction in virtual courses.

7. Study whether virtual resources through the Department of Education could be better leveraged to expand access to Academic Year Governor's School courses.

Coursework is only one facet of the Academic Year Governor's School. There are other integral components, including the *Community of Learners* as an organizational concept underpinning AYGS programs, and the broader curricular focus. Using virtual resources to expand access to AYGS courses could eliminate these two components of a student's experience, diminishing program effectiveness. Therefore, it is not recommended that students outside the AYGS program gain access to the courses. Courses taught at a similar advanced level as some AYGS courses could be offered through Virtual Virginia (VVA), if developed and taught by highly trained teachers familiar with best practice in working with high-ability students, especially in a virtual environment. Virtual options may be leveraged to reach young students with exceptional potential in underserved populations, helping to prepare students with potential at early grades to ensure a diverse pool of highly qualified applicants to the AYGS in high school.

Summary of Recommendations

1. In all policy decisions regarding AYGS programs, recognize the expertise, community connection, and student-centered executive action of AYGS directors. Provide professional development for directors and their staff and facilitate a community of practice for them to interact and more effectively collect institutional wisdom.
2. Recognize that access and participation are best increased by addressing the entire system of obstacles that confronts students and their families. Focusing attention on a single challenge, such as the number of AYGS program available, will not help while other constraints persist.

3. Support additional sites or schools, including consideration of full-time or residential programming if directors deem it appropriate. Expanded virtual options may serve these students to some degree, but they do not provide the social interactions and hands-on instructional experiences that are core to the AYGS model.
4. Revise the *Regulations Governing Educational Services for Gifted Students* to incorporate a talent development program to assist in providing early educational opportunities, shaping a more diverse pool of qualified future AYGS applicants.
5. Revisit completed research on the strengths and weaknesses of the AYGS funding model as it currently operates. The nature of regional programming makes it difficult to deliver the instruction to which AYGS staff aspire, and the current funding model results in fundamental inequities between staff in these programs and those in regular K-12 schools.
6. Create a pool of funds specifically to address transportation issues, as these are ubiquitous and powerful obstacles to AYGS students, particularly from underrepresented populations. Allow directors the freedom to apply those funds in a way that best serves their school and geography.
7. Examine and support the provision of adequate personnel at all AYGS to provide for the mental health and well-being of their students.
8. Provide state support for initiatives that improve awareness of, and recruitment for, AYGS programs. Engage community stakeholders from diverse populations to provide most relevant service and increase participation.

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Chapter 1

Introduction

Productive struggle with appropriate support is the heart of a meaningful education. The process of engineering that struggle for learners across multiple levels of student readiness is one of the characteristic challenges of an education system. While federal law mandates the nature and extent of efforts to appropriately educate students diagnosed with special needs, there is less support and more flexibility when addressing the needs of high ability/gifted and talented (HA/GT) learners. Policies and funding vary greatly from state to state, and Virginia has strengths and challenges regarding its expectations for these students and the models supported for their education (Rinn et al., 2022).

The Academic Year Governor's Schools (AYGS) in Virginia are a flagship initiative within Virginia's menu of options for HA/GT learners. The first five AYGS programs were established in 1985, following a decade of service by summer Governor's Schools at three sites (Stith, 2017). Since then, the field has grown to 19 AYGS programs, across a wide variety of formats and curricula (see Appendix A; VDOE, 2022). These schools represent the highest rigor and selectivity in the portfolio of advanced options in the Commonwealth.

The AYGS model as it is currently operated meets many standards of excellence as articulated in scholarship on advanced academics. The existing function of these schools is pinned to very high academic standards, while maintaining an autonomous flexibility that allows for response to regional context. Specifically, the AYGS programs reviewed in this report predominantly exhibit the following traits of sustainable, responsible academic programming:

- A strong program in advanced academics delivers a high rigor curriculum to students who are identified as excellent and motivated in the targeted content area (Callahan et al., 2017).
- The identification procedures in such a program move attention away from the "gifted" label and toward a demonstrated need for instruction that cannot be delivered in the standard classroom (Peters et al., 2021).
- A quality program collects students from multiple populations into a community of learners that allows risk-taking and personal development as core aspects of identity (Robinson, 2008).
- It is responsive to evaluation within the changing context of the community being served (Speirs Neumeister & Burney, 2021).

There is, however, always room for growth, both figurative and literal. Virginia joins the rest of the nation in recognizing that advanced academic programs too often exclude students of

color or low socioeconomic status, despite their likely success in such programs (NAGC, 2023). In addition, when budgetary priorities must be set, it is easier to downsize advanced academics due to the lack of federal mandate. And given the current emphasis on high-stakes testing and remediation across the K-12 industry, it is sometimes difficult to justify spending the money necessary to provide rigorous challenge for HA/GT learners. More immediately, while AYGS programs in Virginia demonstrate flexible thinking and high expectations, they do not serve enough students.

This study of Virginia Academic Year Governor's Schools, therefore, is both timely and responsible. Clearly, recent controversy has inspired reflection on who is taught in advanced academic programming and why, and how the Commonwealth might better find and serve students who need more depth and complexity across multiple communities. Toward that end, the VDOE proposed a study of the following subjects:

1. Study the existing levels of support at current Academic Year Governor's Schools.
2. Study the need and demand for additional Academic Year Governor's Schools programs, including access and regional diversity in the Commonwealth's eight Superintendent regions.
3. Study the need and demand for additional slots at existing Academic Year Governor's School programs.
4. Study potential costs and timelines for implementation of new Academic Year Governor's School programs.
5. Study the areas of focus provided in the varying models of Academic Year Governor's Schools and the potential demand for additional areas of focus.
6. Study the environments that support students in varying models of Academic Year Governor's Schools (Full Day, Shared-time, Virtual, or Residential).
7. Study whether virtual resources through the Department of Education could be better leveraged to expand access to Academic Year Governor's School courses.

To accomplish these tasks, researchers interviewed each of the 19 AYGS directors, as well as a sample of program alumni and regional board chairs, looking for recommended practices and obstacles to program access. In addition, the authors deployed a survey that garnered nearly 1,200 responses from students, parents, school employees and administrators, school board members, and members of the community. What follows is a description of the research findings, accompanied by recommendations.

Chapter 2

Method

The team developed to complete this research project included three seasoned researchers, one doctoral student, and six master's level students from various education-related programs (e.g., school and clinical counseling, elementary and secondary education). Five students were studying at William & Mary (W&M) and two were at James Madison University (JMU). Two of the principal investigators were from the Center for Gifted Education at the W&M School of Education (Tracy L. Cross and Jennifer Riedl Cross) and one was from the College of Education at JMU (Kristofor R. Wiley). Two consultants offered advice and guidance on program and cultural diversity matters. The investigators and doctoral student met weekly for planning and assessing the study design and data collected. The Virginia Department of Education (VDOE) announced the study statewide, encouraging the support of potential participants. Approval for the study was granted by the William & Mary Education Internal Review Committee (EDIRC).

Procedure

The study required a multi-pronged approach for data gathering. We needed to learn as much as possible from documentation about the AYGS. Many of these documents were provided by the Office of STEM & Innovation at VDOE. Others were obtained through internet searches. Graduate student assistants compiled the information about each school into a database. In addition to document analysis, we conducted interviews and surveyed stakeholders.

The survey was developed using Qualtrics online survey software. It was distributed broadly throughout the state. AYGS directors were invited to share an announcement and link to the online survey Invitations to their communities, with the following descriptor: "The survey is intended for all adults (18 and up) who have an interest in the Academic Year Governor's Schools, including alumni, parents, teachers, counselors, school officials at all levels, board members, and community members." Emails were sent to all gifted coordinators and school division superintendents, inviting them to participate and to share the announcement in their communities. To expand the survey's reach into regions with greater African American and Hispanic stakeholders, invitations were sent to the Virginia NAACP, to NAACP and Virginia Education Association chapters in counties with highly diverse populations, and to the Baptist General Convention of Virginia. Alumni volunteered in response to some of these outreach efforts and at the request of personal contacts at several Virginia universities.

Instruments

The interview protocols (see Appendix B) were developed from the research questions and adapted to fit each stakeholder group. The semi-structured interviews allowed for

participants to expand on their responses and for the interviewers to pursue interesting directions suggested by the conversation. Interviews were conducted through Zoom.

The anonymous online survey (see Appendix C) was designed to access respondents' attitudes and beliefs about the topics underlying the research questions. The wide range of stakeholders to be surveyed suggested a dual approach to the items in the survey. Some respondents would be interested in questions about AYGS in general, whereas some would be more interested in questions targeting their specific AYGS. To allow for both of these perspectives, participants were asked to choose which survey they wished to take by selecting one of the following statements:

“I would like to respond to questions about Academic Year Governor's Schools **in general**”

“I would like to respond to questions about **a specific** Academic Year Governor's School”

Participants could take the survey multiple times, if they wished to respond to both general and specific surveys.

The survey comprised eight sections designed to elicit participants' attitudes regarding access to AYGS, the selection process, the need for more AYGS, curricular focus, schedule, social/emotional and cultural diversity, virtual, and support for AYGS. The sections were the same in both survey options, but items in the “Specific” survey included the AYGS school name, along with language and items appropriate for a specific school. For each section, participants were invited to share open-ended comments on the subject.

Samples

Online interviews were conducted via Zoom with all 19 AYGS directors. In addition, 22 alumni and three regional board chairs were interviewed. The majority of the 1173 respondents to the survey were female (74.3%), not Hispanic or Latino (86.7%), and White (79.3%). See Table 1 for respondent demographics. Note that respondents could choose multiple race designations, and these are noted in the table. Fifty-five percent ($n = 646$) of respondents chose the “Specific” survey option (see Table 2). Two percent ($n = 22$) of the 1173 respondents took the survey more than once. Nearly half of respondents were parents (45.7%, $n = 536$).

For ease of interpretation, the 19 possible stakeholder roles were collapsed into 5 meaningful categories: Student, Parent, School Employee, Community or Board Member, and Other/Multiple Roles. To gain a detailed understanding of who responded to the survey, Table 3 includes the aggregated roles used in analyses, along with a breakdown of the disaggregated roles. Respondents could select “Other” roles, which they could describe. These tended to be school positions not listed or categories such as “alumni”.

As an anonymous survey, no identifying information was collected. There is no indication of the parts of the Commonwealth represented by those responding to the “General” survey option. Responses for specific AYGS varied widely in the number per school. Respondents from the regions with low numbers of responses may have taken the “General” survey, however. Based on our broad outreach efforts, it is quite likely the survey received responses from across the state.

Analysis

Directors’ interviews were transcribed, summarized, and coded descriptively. Alumni and Regional Board Chair interviews were transcribed and summarized. All interviews contributed substantively to the researchers’ understanding of the AYGS phenomenon. Respondents were asked to share open-ended comments about each subject area on the survey. A total of 1983 open-ended responses were coded, first by the researchers, who analyzed approximately 20% of responses to identify salient codes, then by pairs of research assistants. After coding, the research assistants discussed any codes that did not match until they were in agreement. Quotes included in the report are identified with the following nomenclature. The “xxxx” were randomized numeric codes.

Open-Ended Comments

Student: STU23xxxx

School Employee: SE23xxxx

Parent: PAR23xxxx

Community or Board Member: COM23xxxx

Other roles: OTH23xxxx

Multiple roles: MUL23xxxx

Student: STU23xxxx

Interview Quotes

Alumni: STUxxxx

Directors: DIRxxxx

Analyses of differences among stakeholders and by locale were conducted using the Kruskal-Wallis H-test, a non-parametric analysis of variance. This test was chosen due to the radically different group sizes (see Tables 1 & 3). The unequal distribution of data disqualified it from analyses using common parametric techniques. Missing data was not replaced, as this was a descriptive study of stakeholders’ attitudes.

Table 1
Survey Respondent Characteristics

	Number	Percent	
Gender			
Male	262	22.3	
Female	872	74.3	
Non-binary/Third gender	3	0.3	
Prefer to self-describe	2	0.2	
Prefer not to say	26	2.2	
Missing	8	0.7	
Ethnicity			
Hispanic or Latino	44	3.8	
Not Hispanic or Latino	1017	86.7	
Prefer not to say	72	6.4	
Missing	40	3.4	
Race			
			Represented in Multiple Race Option
American Indian or Alaska Native	0	0	7
Asian	49	4.2	14
Black or African American	61	5.2	5
Native Hawaiian or Other Pacific Islander	1	0.1	7
White	930	79.3	24
Other	11	0.9	1
Multiple Races	25	2.1	
Prefer Not to Say	85	7.2	
Missing	11	0.9	
Rural/Urban			
Rural	398	33.9	
Small city or town	436	37.2	
Suburb of a large city	236	20.1	
Large city	75	6.4	
Other	21	1.8	
Missing	7	0.6	
Total	1173	100	

Table 2
Stakeholder Roles by Survey Option (General or Specific)

Stakeholder Role	General		Specific		Total	
	Number	Percent	Number	Percent	Number	Percent
Student	52	9.9	145	22.4	197	16.8
Parent	226	42.9	310	48	536	45.7
School						
Employee	113	21.4	87	13.5	200	17
Community or Board Member	24	4.6	14	2.2	38	3.2
Other/Multiple Roles	97	18.4	83	12.8	180	15.3
Prefer Not to Say	11	2.1	4	0.6	15	1.3
Missing	4	0.8	3	0.5	7	0.6
Total	527	100.0	646	100	1173	100

Table 3*Stakeholder Roles (General & Specific Survey Options)*

Role (aggregated)	Frequency	Percent	Role (disaggregated)	Frequency	Percent
Student	197	16.8			
			AYGS Student Current	112	9.5
			AYGS Student Alum	76	6.5
			Non-AYGS Student Current	8	0.7
			Non-AYGS Student Alum	1	0.1
Parent	536	45.7			
			AYGS Parent Current	436	37.2
			AYGS Parent Alum	49	4.2
			Non-AYGS Parent Current	50	4.3
			Non-AYGS Parent Alum	1	0.1
School Employee	200	17			
			AYGS Administrator	17	1.4
			Non-AYGS Administrator	44	3.7
			AYGS Fac/Staff	77	6.5
			Non-AYGS Fac/Staff	21	1.8
			Gifted Coordinator	41	3.5
Community or Board Member	38	3.2			
			Board Member	2	0.2
			School Board Member	4	0.3
			AYGS Regional Board Member	8	0.7
			Community Member	24	2

Role (aggregated)	Frequency	Percent	Role (disaggregated)	Frequency	Percent
Other/Multiple Roles	180	15.3			
				15.3	Represented in Other/Multiple Roles
			Parent	94	
			Community Member	64	
			School Faculty/Staff	40	
			School Student	19	
			School Administrator	21	
			Gifted Coordinator	18	
			Other	17	
			Board Member	14	
Prefer Not to Say	15	1.3		1.3	
Missing	7	0.6		0.6	
Total	1173	100		100	

Table 4*AYGS Respondents by Stakeholder Role (Specific Survey Option)*

	Student		Parent		School Employee		Community or Board Member		Other/ Multiple Roles		Prefer Not to Say		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
A. Linwood Holton Governor's School	0		0		2	100.0	0		0		0		2	100.0
Appomattox Regional Governor's School for Arts & Technology	1	2.3	37	86.0	1	2.3	0		4	9.3	0		43	100.0
Blue Ridge Virginia Governor's School	3	21.4	4	28.6	0		0		7	50.0	0		14	100.0
Central Virginia Governor's School for Science & Technology	5	20.8	4	16.7	8	33.3	1	4.2	6	25.0	0		24	100.0
Chesapeake Bay Governor's School for Marine & Environmental Science	7	31.8	4	18.2	3	13.6	1	4.5	5	22.7	2	9.1	22	100.0
Commonwealth Governor's School	41	32.0	58	45.3	14	10.9	0		15	11.7	0		128	100.0
Governor's School for the Arts	1	2.1	39	83.0	2	4.3	1	2.1	4	8.5	0		47	100.0
Jackson River Governor's School	0		3	42.9	3	42.9	1	14.3	0		0		7	100.0
Maggie L. Walker Governor's School for Government & International Studies	16	22.5	44	62.0	5	7.0	0		6	8.5	0		71	100.0
Massanutten Governor's School for Integrated Environmental Science & Technology	31	44.3	26	37.1	5	7.1	2	2.9	6	8.6	0		70	100.0

	Student		Parent		School Employee		Community or Board Member		Other/ Multiple Roles		Prefer Not to Say		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Mountain Vista Governor's School	14	21.2	27	40.9	8	12.1	3	4.5	14	21.2	0		66	100.0
New Horizons Governor's School for Science & Technology	4	22.2	4	22.2	5	27.8	2	11.1	2	11.1	1	5.6	18	100.0
Piedmont Governor's School	0		4	57.1	3	42.9	0		0		0		7	100.0
Roanoke Valley Governor's School for Science & Technology	2	10.0	7	35.0	10	50.0	0		1	5.0	0		20	100.0
Shenandoah Valley Governor's School	0		1	100.0	0		0		0		0		1	100.0
Southwest Virginia Governor's School for Science, Mathematics & Technology	3	12.5	9	37.5	9	37.5	0		3	12.5	0		24	100.0
The Governor's School of Southside Virginia	8	22.9	18	51.4	3	8.6	2	5.7	4	11.4	0		35	100.0
Thomas Jefferson High School for Science & Technology	0		0		1	50.0	0		0		1	50.0	2	100.0
The Governor's School at Innovation Park	1	5.6	12	66.7	3	16.7	0		2	11.1	0		18	100.0
Total	137	22.1	301	48.6	85	13.7	13	2.1	79	12.8	4	0.6	619	100.0

Note: No role specified for 27 respondents

Chapter 3

Examining Levels of Support

In this section we will delve into the level of support for AYGS. Gifted programs play a crucial role in meeting the unique needs of intellectually advanced learners. These exceptional learners possess exceptional abilities that require specialized programming to maximize their potential. By offering accelerated and enriched curriculum, personalized instruction, and opportunities for intellectual challenge, gifted programs provide an environment where high-ability and gifted and talented (HA/GT) students can realize their potential. However, the success of these programs relies heavily on the support they receive. Adequate funding, dedicated resources, and knowledgeable educators are essential to ensure that HA/GT students receive the type of education they require. Without proper support for gifted programs, these exceptional students may be left unchallenged, disengaged, and unable to reach their full potential, which not only hampers their individual growth but also impedes societal progress by neglecting the talents and contributions they could offer. Thus, it is imperative that we recognize the importance of supporting and investing in gifted programs to foster the development of our most exceptional minds and nurture future leaders, innovators, and change-makers.

It is also important to consider Gallagher's (2013) assertion that offering opportunities and resources is crucial for facilitating the progress of HA/GT students, while promoting the concept of "excellence for all" as an inclusive educational policy (Renzulli, 2003). It is noteworthy, however, that McCoach and Siegle (2007) found a comparatively lower level of support for gifted educational interventions among special education educators. Additionally, Jung's (2014) study examining attitudes towards gifted programs among preservice teachers revealed that support for such programs was predicted by factors such as an egalitarian orientation, contact with gifted individuals, and older age (of the preservice teachers). Conversely, younger preservice teachers with limited exposure to advanced curriculum in regular classrooms perceived special gifted programs as elitist. These findings provide valuable insights into the level of support for gifted education, which will be further explored within the AYGS context, with the help of the perceptions of various stakeholders.

A core purpose of the Academic Year Governor's Schools (AYGS) is to create a "community of learners whereby close, trusting relationships among faculty and students give rise to a climate that stimulates growth and intellectual development" (Virginia Department of Education Procedures for Initiating an Academic-Year Governor's School, 1998, p. 9). Historically, while certain individuals have indeed been identified for their cognitive abilities, the broader basis of giftedness, which includes exceptional, well-rounded growth and/or remarkable potential, as established through long-term studies, was either not supported or went unnoticed (Wood & Laycraft, 2020). Wood and Laycraft (2020) also indicated that when HA/GT children find themselves in an unsuitable environment, they exhibit signs of ineffective mental stimulation, commonly manifesting as restlessness and apprehension, thereby hindering their

progress and growth. HA/GT children often see their close friends and teachers as social support (Ogurlu et al., 2018). Perceived support from family and peers among HA/GT children has been seen to be related to their positive psychological adjustment (Dunn et al., 1987). Several studies have found that social and emotional competence, which develops through the socialization process (Parsi, 2001), is an important factor for success in life, success in school, well-being, and readiness for work (Csikszentmihalyi et al., 1993; Gardner, 1983; Guerra & Bradshaw, 2008). In her case study of profoundly gifted students' virtual classroom experience, Potts (2019) documented their expressed need for more social opportunities, preferring frequent interactions with their classmates and instructors. Being part of a community that appreciates one's intellectual abilities and interests is foundational to HA/GT students' ultimate success (Coleman et al., 2015; French et al., 2011; Oyserman et al., 2017; Rollins & Cross, 2014a, 2014b).

Level of Support for AYGS

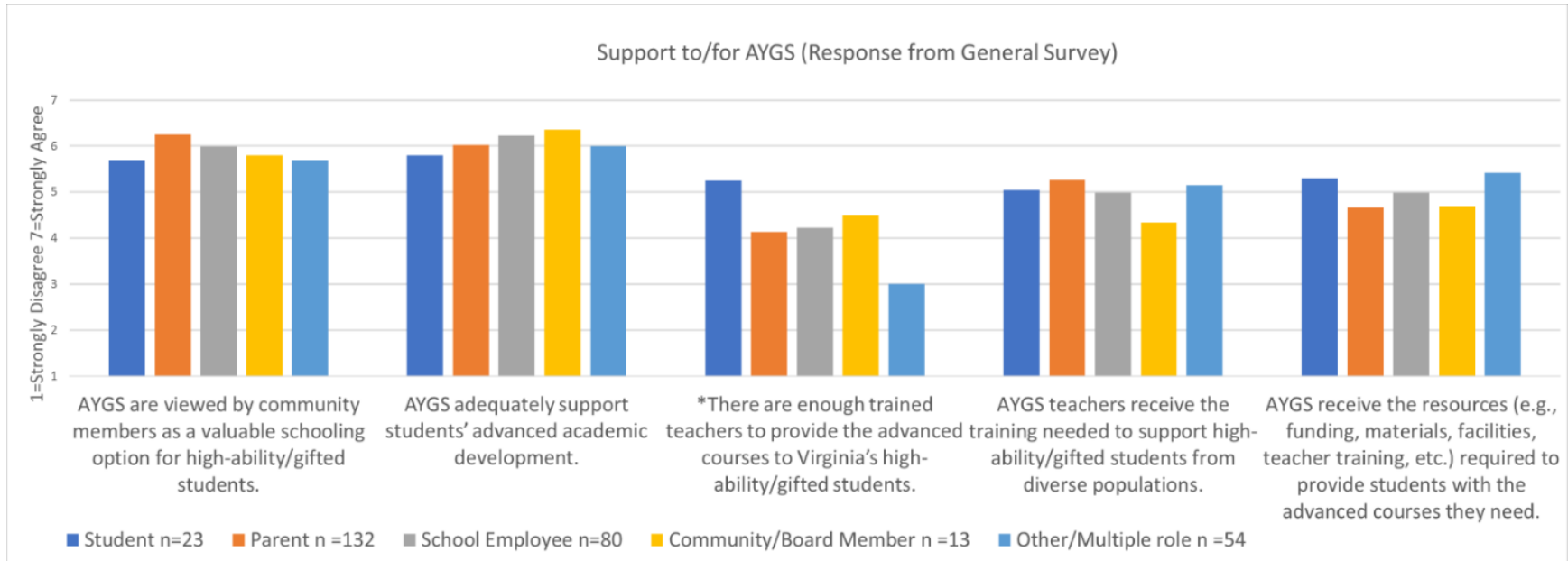
Perceptions of support at and for the Academic Year Governor's Schools (AYGS) were studied through a custom-designed survey. Support was resoundingly positive from all quarters. The responses from participants who were the stakeholders of AYGS, including AYGS students, provide insights into the level of support for the AYGS in Virginia. The data suggest that there is overall support for AYGS as a valuable option for HA/GT students and for their role in supporting advanced academic development. What concerns exist among the stakeholders are secondary to their belief in the program as effective and valuable. Stakeholders actively voiced their support and engagement with AYGS while also highlighting several challenges related to communication, awareness, teacher quality and training, as well as funding and resources. Improvements in these areas will enhance the overall effectiveness and success of these schools. These concerns encompassed various aspects of AYGS, reflecting the importance of addressing them to ensure optimal outcomes for the HA/GT students they serve.

Community Support and Stakeholder Engagement

Stakeholder support and engagement can play a crucial role in the success of AYGS. By understanding the level of support and engagement from different stakeholders, it becomes possible to identify the factors that contribute to a positive and collaborative environment within these schools. Here we explore the perception of superintendents, school board members, parents, students, alumni, and other community members, shedding light on their support for the program and their active engagement in shaping the educational journey of HA/GT students at AYGS.

There was strong agreement among stakeholders about AYGS in general (Figure 1) and any specific AYGS (Figure 2) being supported by the community members as a valuable schooling option for high ability/gifted students. All stakeholder groups also expressed a high

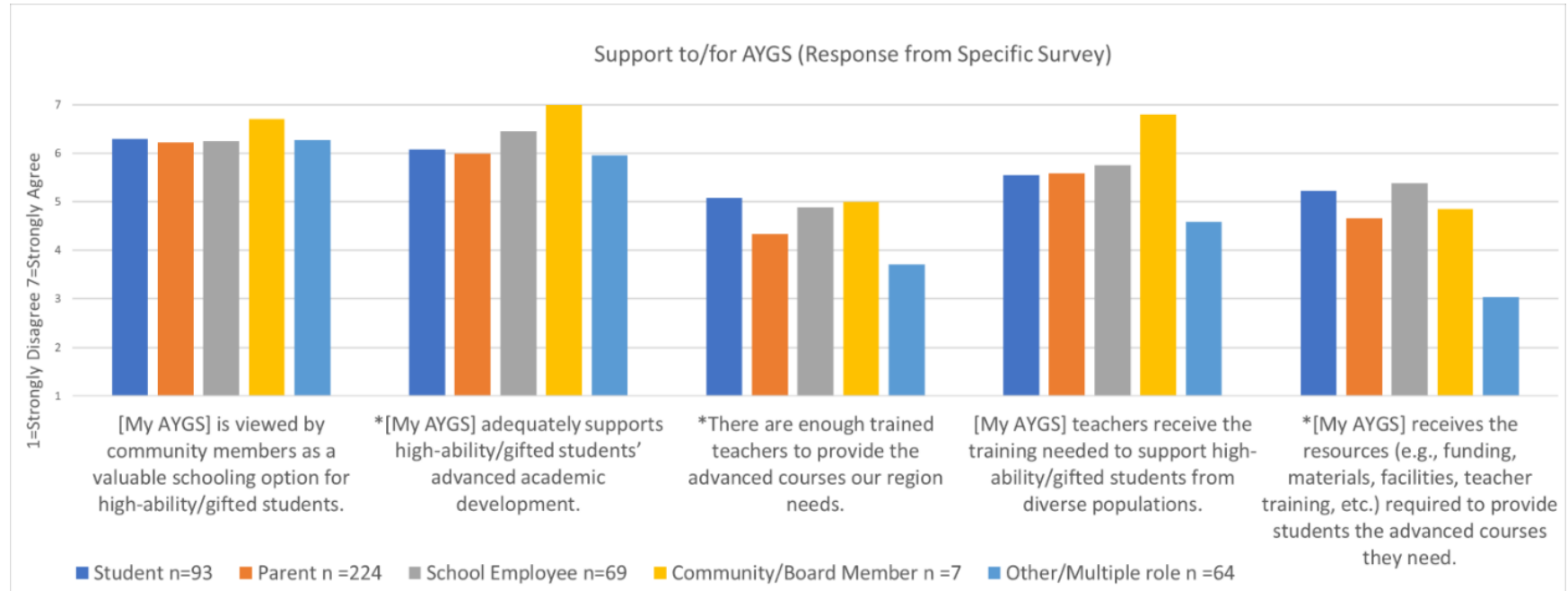
Figure 1
Support to/ for AYGS (General Survey Responses)



Note: Scores above 4.0 indicate agreement.

* Other/Multiple Role is less in agreement than Students $p < .05$

Figure 2
Support for AYGS (Specific Survey Responses)



Note: Scores above 4.0 indicate agreement.

* $p < .05$

level of agreement that all AYGS (Figure 1 & Figure 2) adequately support students' advanced academic development. However, when answering this question about a specific AYGS, there was a significant difference¹ in the perception of different stakeholder groups, with community or board members agreeing more strongly that the AYGS supports students' development than students, parents, and those in other or multiple roles (Figure 2). Even with group differences, however, all respondents strongly agreed that their AYGS supports students' academic development.

In some regions with few participating divisions, all key stakeholders, including students, parents, central office staff, superintendents, school board members, community members, and businesses, exhibited robust support for the program. The presence of parent-teacher committees and the Parent Teacher Student Organization (PTSO) in some AYGS provided avenues for feedback, creating opportunities for continuous improvement and collaboration between stakeholders. This broad spectrum of support and collaborative efforts from diverse stakeholder groups indicates a strong endorsement and recognition of the value provided by the AYGS. One parent said, "These are amazing schools..." (PAR230006). Similarly, another parent commented, "I DO know that they provide excellent educational opportunities and support for our students. The staff that we have interacted with have all been extremely professional and exemplary. The director of [My AYGS] truly impresses us with how involved he is in the day-to-day communication and interaction with parents and students!" (PAR230717).

At one school, when concerns were raised regarding the need for additional activities beyond academics to promote student interaction, the school took proactive measures by organizing student mixers, thus fostering a sense of community and collaboration among the students. This was perceived by the stakeholders positively, making them feel that their concerns were addressed. One AYGS demonstrated a commitment to engaging stakeholders through a strategic planning process. This process involved collecting feedback from students and staff, which was generally positive and reflected the stakeholders' satisfaction with the program. The involvement of a Parent Support Advisory Council and alumni in the planning process showcased the school's efforts to actively engage stakeholders and incorporate their perspectives into decision-making, thus, actively contributing to the enhancement of the program. The alumni's continued support and the teachers' initiative to create an alumni database further strengthen the bond between that school and its former students. These responses collectively highlight the strong support from stakeholders in these AYGS institutions. The endorsement of the program, active engagement in strategic planning processes, and the involvement of several stakeholders, demonstrate their commitment and collaborative spirit. This support and engagement contribute to creating an enriching educational experience for HA/GT students within the AYGS schools.

¹ Kruskal-Wallis H test: ($\chi^2[5] = 29.97, p < .05$)

Balancing Diverse Perspectives

While the overall messages from stakeholders regarding AYGS have been largely positive and indicative of a strong commitment to HA/GT students, it is important to acknowledge that not all participants believed the AYGS received support in their communities. One participant expressed their disappointment in their school board's support for the AYGS by saying, "I was appalled that the school board used stupid tactics threatening [My AYGS], as a budget cut. So, the lack of level of support is shocking. They may not have had real intention of getting rid of the program, but even throwing the option out there shows a lack of support of our gifted and high achieving students" (PAR230958). Another participant reported, "[My AYGS] was placed on the metaphorical chopping block due to budget cuts" (SE230879). Despite the strong support and endorsement from stakeholders, some local or regional agencies exhibit a lack of support and even resort to measures taken against the very institutions these stakeholders value. This contradiction between the positive feedback from stakeholders and the negative actions of local or regional agencies highlights the complex dynamics surrounding the educational landscape of AYGS schools.

It is essential to recognize that differing perspectives and experiences among stakeholders can exist within any educational system. While the majority of feedback points to strong support and engagement with AYGS, it is crucial to address and investigate the concerns raised by participants who feel that their AYGS program was potentially at risk due to budgetary considerations. These contrasting comments highlight the importance of ensuring consistent support and resources for AYGS across all regions, emphasizing the need for transparent communication, advocacy, and continued efforts to prioritize the needs of HA/GT students. It is also important to understand that there is a myth that HA/GT students can succeed on their own. A school employee stated, "Within the court of public opinion, there is a misguided and, quite frankly, blatantly incorrect notion that gifted students will be able to succeed purely on their own. More awareness needs to be directed at research-supported advocacy for programs like AYGS... we must strive to fund and continue services for gifted students" (SE230879). It is essential to listen to the concerns of stakeholders and work collaboratively to find solutions that strengthen the AYGS programs, ensuring the continued provision of an enriching and supportive educational environment for HA/GT students.

Challenges in Communication and Awareness

In examining the perceptions and experiences of stakeholders at various AYGS, it becomes apparent that there are certain challenges in communication and awareness that need to be addressed. It was evident that not all AYGS institutions received uniformly positive reports in the open-ended comments provided in the survey. By identifying these challenges, it becomes possible to recognize the significance of improving communication, increasing community awareness, and fostering better coordination with stakeholders for enhanced program support and effectiveness.

For instance, at one school, participants mentioned the presence of contentious relationships between teachers and the administration. This suggests the existence of underlying issues in communication or collaboration between these two groups, which can potentially impact the overall support and functioning of the school. Similarly, for some AYGS there were issues related to communication with parents and other stakeholders. One school employee specifically stated that some district teachers had expressed fears that AYGS attracts advanced students, leading to a depletion of HA/GT students in their own classrooms. This highlights the need for effective communication and awareness practices to address this perception and ensure that teachers understand the value and benefits of AYGS. Such measures can address the misconceptions, and teachers can recognize the complementary nature of AYGS in nurturing HA/GT students while also supporting the overall educational ecosystem.

Additionally, several parents also expressed the need for increased communication and community awareness of the program, highlighting a desire for more positive engagement among the different stakeholders. This can be understood when the data suggested that initial negativity expressed by some school counselors and departments in the base school often diminished as they became more familiar with the goals and objectives of the AYGS program. One parent highlighted, “Sadly, I do not think our superintendent, or some administrators, teachers, and central office staff appreciate the value of governor's school. The people in the community who appreciate it have usually had some experience with it” (PAR230154). These comments further highlight the importance of information dissemination, providing accurate information, and fostering a deeper understanding among stakeholders to alleviate any concerns or misconceptions. By fostering better communication channels, increasing community awareness, and ensuring accurate information dissemination, AYGS institutions can overcome these challenges and build stronger relationships with their stakeholders. These efforts will contribute to a more cohesive and supportive educational environment that meets the unique needs of HA/GT students.

Teacher Quality and Training

Stakeholders in the Governor's Schools hold varying perceptions regarding the availability of trained teachers to support HA/GT students. While there is generally a positive perception that all AYGS teachers receive the necessary training, concerns arise regarding the availability of qualified teachers to provide advanced courses for HA/GT students. These perceptions differed significantly among the different stakeholders, both when they were answering about a specific² AYGS and all AYGS in general³. When referring to AYGS in general, students⁴ were more likely to agree about the availability of trained teachers compared to parents, school employees, and community board members, where the individuals who have

² Kruskal-Wallis H test: ($\chi^2[5] = 14.24, p < .05$)

³ Kruskal-Wallis H test: ($\chi^2[5] = 13.20, p < .05$)

⁴ Mean=5.25, SD=1.33

other or multiple roles⁵ often expressed disagreement. Similarly, when discussing specific schools, students, school employees, and community board members were more likely to agree about the availability of trained teachers compared to parents and individuals with other or multiple roles.

To further understand the above perceptions, the comments from the qualitative data also indicate the importance of well-qualified and supported teachers in the Governor's Schools. It was noticed that stakeholders believe additional resources, funding, and training are needed to attract and retain talented educators, provide adequate support for their well-being, and foster a positive learning environment for the students. One participant with multiple roles stated, “Education is suffering everywhere right now. Until they start paying teachers higher salaries you are not going to get the best from the teachers. Why would a science teacher teach in a school when they can make 3 times as much out in the corporate world? Teachers have to have a deep love of teaching to stay with it. Unfortunately, it takes [a] toll on the teachers and their families, forcing them to make [career] changes” (MUL230544).

There were mixed opinions about the quality of teachers in the Governor's Schools. In most cases, teachers across the AYGS were considered qualified, but they often face challenges such as overwork and the need to commute long distances. For example, a student stated, “The teachers are qualified but overworked, and they have to drive long distances” (STU230504). While some comments highlighted concerns such as poor teaching practices, lack of approachability, and ineffective instruction, others acknowledge the qualifications and preparedness of the teachers, praising them for providing excellent educational opportunities and support to the students. Sometimes, concerns were also raised about the lack of training in pedagogy and the need for teachers who possess both content knowledge, diversity training and effective teaching skills. A school employee stated, “Teacher training regarding gifted education is not routinely offered here and must be paid for by teachers themselves if they want to receive it” (SE230028). The importance of mentorship and support for new teachers were also emphasized, as some comments indicated that teachers may need time and assistance to develop their skills and adapt to the unique demands of teaching HA/GT students which has often been supported by research (e.g., Hansen & Feldhusen, 1994; Sahin, 2021).

There was a desire seen for more rigorous hiring processes to ensure that only the best instructors are selected to educate the high-achieving students in the AYGS. The perpetual shortage of funding in some schools further exacerbates the difficulties faced by the teachers and their hiring process. A parent stated, “More funds are needed to pay teachers who are qualified in the higher levels of education to teach these very bright, creative, and intelligent kids” (PAR23055). The issue of teacher retention was also mentioned, with turnover and vacancies being a cause for concern. There was a consistent concern regarding the shortage of qualified

⁵ Mean= 3.71, SD=1.57; see Table 3 for a description of Multiple Role categories

teachers across various subjects. Increased funding from the state was seen as a potential solution to provide more opportunities for students and to support activities, materials, field trips, and guest speakers. A school employee emphasized, “Additional funding would allow for additional opportunities for students as well as additional professional development for staff” (SE230500).

Funding and Resources

There was a moderate level of agreement regarding the provision of resources to AYGS (Figure 1), however, perceptions were significantly different⁶ among stakeholders when answering about a specific AYGS (Figure 2). While there was not a high agreement on AYGS receiving adequate resources, students and school employees agreed more in comparison to parents, community members, and individuals in other/multiple roles, where the individuals having other/multiple roles were more likely to disagree⁷. The comments from the stakeholders also emphasize the reliance on external sources of funding, such as grants and donations, to supplement the insufficient funding provided by the state or local authorities. For example, a parent stated,

Knowing that the governor's schools essentially have to apply for grants through other school districts to even get work done on the building seems to scream that they are cut off from valuable federal/state funding that is necessary for them to continue to educate the youth of tomorrow. How much more time could go into staff development and student resources if they didn't have to convince another school district to apply for them, and then do all of the leg work for the grants, and get it back to the other district to get it turned in? (PAR23075)

This dependence on external funding creates a challenge for AYGS, as it limits their capacity to consistently provide the desired level of education. The disparities in resource allocation become more pronounced as some AYGS have greater access to external funding, enabling them to provide enhanced educational experiences compared to the others. A community member stated, “The difference in facilities and scale between [My AYGS] and, say, [other AYGS] is crazy. One gov school isn't really supported by half its districts and resides in trailers at the local community college, while the other just got a \$90 million renovation with a replica of the dome at Monticello” (COM230254). Such disparities may result in unequal opportunities for students, creating educational disparities within the AYGS programs. Another parent said, “Our school board is threatening to dismantle [My AYGS] due to funding. This would be a travesty” (PAR230856).

The urgent need for increased funding from both the state and local levels to support various aspects of the schools was found to be a recurring theme in the comments. Adequate

⁶ Kruskal-Wallis H test: ($\chi^2[5] = 25.24, p < .05$)

⁷ Mean= 3.03, SD= 1.22; see Table 3 for a description of Multiple Role categories

funding is crucial for improving student projects, procuring necessary materials, maintaining facilities, upgrading technology, providing additional course options, and facilitating professional development. Discussing the course options a student said, “I also understand that funding restraints make narrowing down the subject a necessary evil. I don't think a STEM school is a bad thing, but if the proper resources are available more subjects should always be available” (STU230217). Moreover, stakeholders frequently mentioned the shortage of teachers and the pressing need for increased funding to attract and retain qualified educators. They highlighted the challenges faced by Governor's Schools in competing with higher-paying opportunities outside of the education sector, resulting in a scarcity of skilled teachers.

Concerns were also raised regarding the condition of the facilities, encompassing issues such as leaks, mold, and outdated technology. Inadequate funding and resources have hampered the ability of some AYGS to maintain appropriate and well-equipped facilities, thereby affecting the overall learning environment and the potential success of the programs. Funding and resources also play a vital role in addressing the limitations in mental health support. Some respondents proposed forming partnerships with external organizations specializing in mental health services, highlighting the need for additional funding to establish comprehensive mental health programs within AYGS. With the help of additional funding and resources for AYGS (see chapter 5), such measures can help in enhancing their mental health support services and providing students with the necessary assistance and resources to navigate their academic journey effectively.

Thus, the above section on perceptions of support for the AYGS in Virginia provided valuable insights into stakeholder engagement and challenges faced by these schools. Stakeholders expressed strong support for AYGS as a valuable option for HA/GT students, but concerns were raised regarding communication, teacher quality and training, and funding. Stakeholders recognized the importance of addressing these challenges to enhance the effectiveness of AYGS. Stakeholders also believed that efforts should focus on fostering community support, addressing diverse perspectives, improving communication and awareness, and securing adequate funding and resources. Building upon their current best efforts to cater to the needs of HA/GT students, AYGS can provide better services and opportunities by addressing the above discussed areas.

Level of Support within AYGS

Perceptions of social emotional aspects at the Academic Year Governor's Schools (AYGS) among different stakeholders were also studied with the help of survey and interviews. On delving deeper into the data and analyzing the responses provided by participants from specific schools, it becomes evident that the level of support at AYGS, particularly concerning cultural diversity and mental health, as well as community building, varies across different institutions. The findings indicate that most schools actively make efforts to foster a sense of community and provide support to their students in these areas. These schools recognize the

importance of creating an inclusive and nurturing environment where students can feel a sense of belonging and camaraderie. These findings underscore the importance of creating a nurturing and inclusive environment that not only focuses on academic excellence but also recognizes and supports the social and emotional aspects of students' development.

However, it was also apparent that there are some schools that need improvement in these aspects, as per the perception of their stakeholders. This suggests that not all AYGS have achieved the same level of success in these areas. While some schools are recognized for their efforts in promoting an inclusive and supportive environment, others may need to invest more resources and implement effective programs to address the diverse needs of their student population. It is important to acknowledge these shortcomings perceived by the stakeholder and work towards enhancing the support systems and initiatives in schools where improvements are needed.

To illustrate the above through data, we saw that there were significant differences among the stakeholders in the perception of supporting the culturally diverse needs of the students both when they were considering AYGS in general (Figure 3) and their specific⁸ AYGS (Figure 4). Also, there were significant differences among the stakeholders in the perception of building a sense of community⁹ and supporting the mental health and well-being¹⁰ of the students (Figure 4) when responding to their specific AYGS. When it comes to building a sense of community among advanced learners, community and board members expressed the highest agreement¹¹, followed closely by school employees, students, parents and those in other/multiple roles¹². Moreover, in terms of supporting the mental health and well-being of HA/GT students, the few community/board members ($n = 7$) who responded to questions about their specific AYGS agreed more¹³ than all the other stakeholders, with those in other/multiple roles agreeing the least¹⁴. One parent stated, "Almost zero consideration is given for mental health. No downtime whatsoever when assignments are due on Fridays and Sundays by midnight! Tests on Mondays also ruin weekends. Kids need time to study and time to be free of concerns, not needing to work over holidays or be tested on material never taught!" (PAR23095). Finally, when it came to supporting the culturally diverse needs of HA/GT students, the results were similar to the mental health question, with community/board members agreeing most¹⁵ and those in other/multiple roles agreeing least¹⁶. This can be illustrated by one "Other" participant, who

⁸ Kruskal-Wallis H test: ($\chi^2[5] = 15.61, p < .05$)

⁹ Kruskal-Wallis H test: ($\chi^2[5] = 16.82, p < .05$)

¹⁰ Kruskal-Wallis H test: ($\chi^2[5] = 29.17, p < .05$)

¹¹ Mean=6.86, SD= .38

¹² Mean= 5.21, SD= 2.63

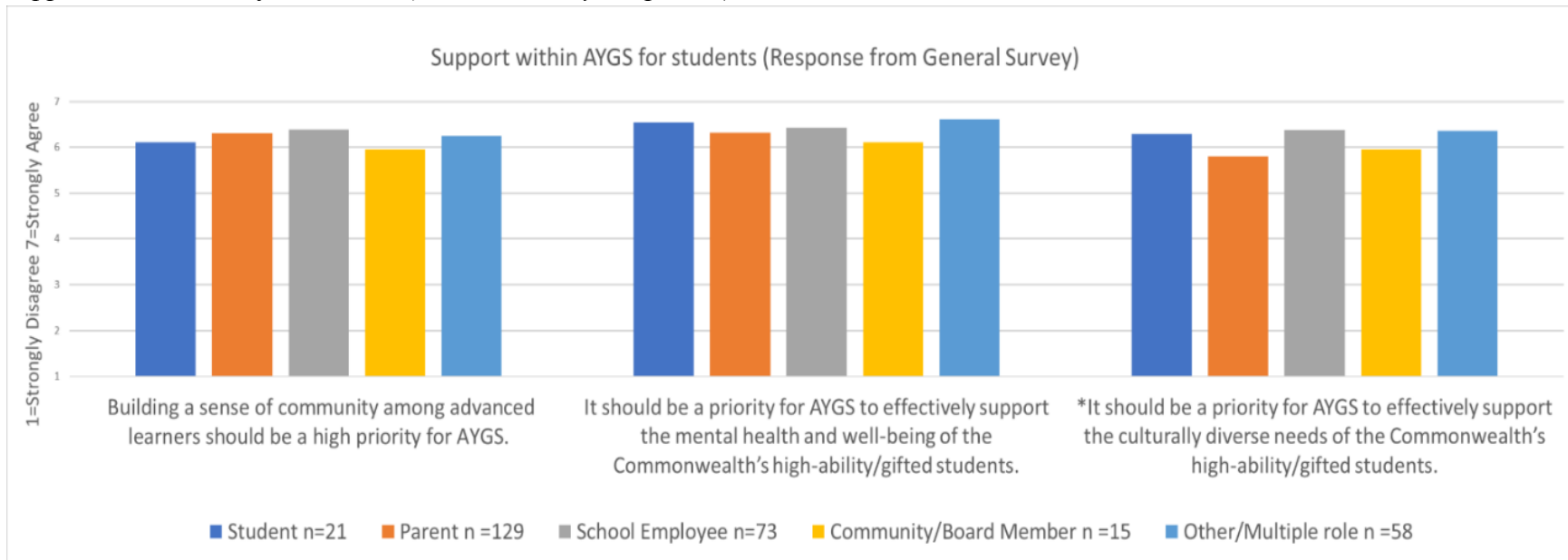
¹³ Mean= 6.83, SD=.41

¹⁴ Mean=4.79, SD= 2.98

¹⁵ Mean= 6.67, SD=.52

¹⁶ Mean= 4.76, SD= 2.87

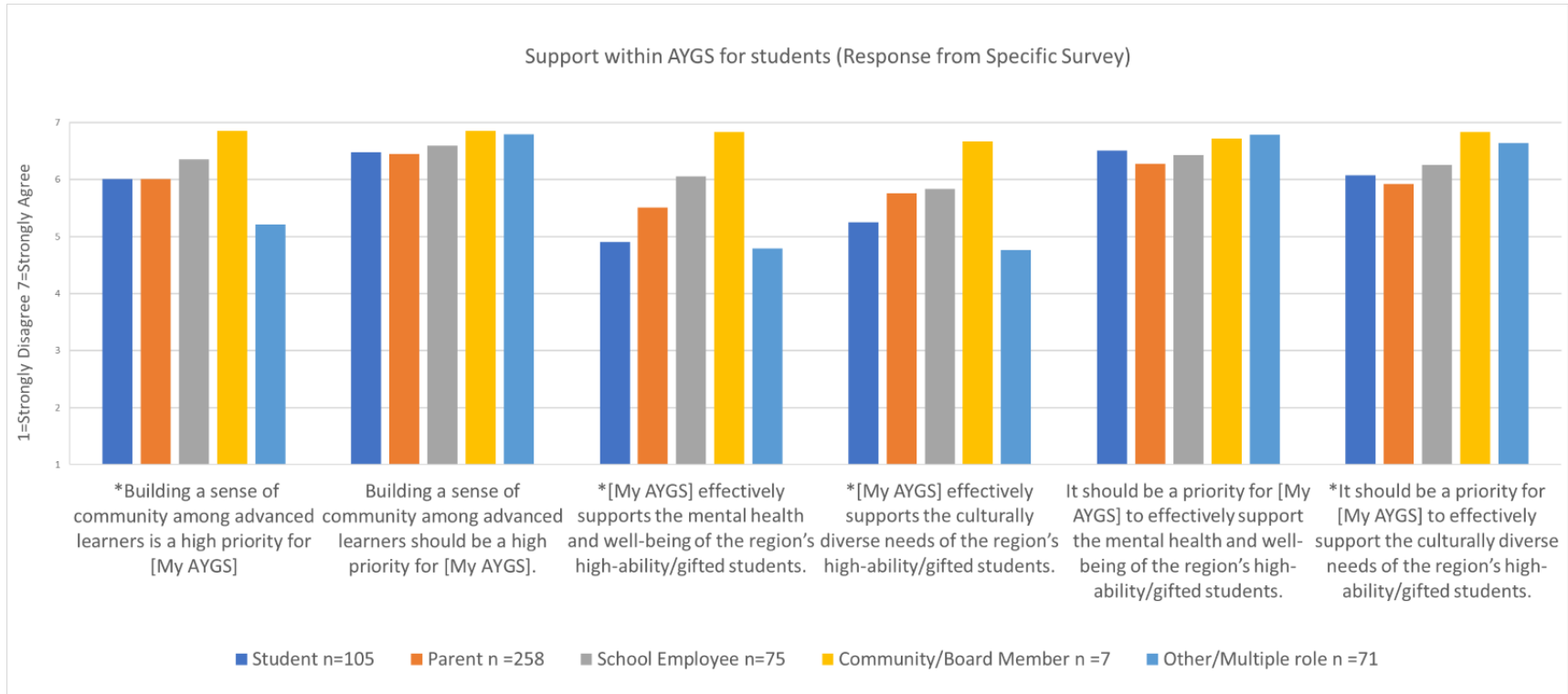
Figure 3
Support within AYGS for Students (General Survey Responses)



Note: Scores above 4.0 indicate agreement.

* $p < .05$

Figure 4
Support within AYGS for Students (Specific Survey Responses)



Note: Scores above 4.0 indicate agreement.

* $p < .05$

said, “[My AYGS] could care less about the mental health needs of parents or students - the same goes for culturally diverse needs -- none of educators or the leadership care about either...” (OTH230682).

Stakeholders may have divergent views and experiences when it comes to these specific aspects of any AYGS. The differences in perception could be attributed to several factors, including individual backgrounds, roles, and expectations. Each stakeholder group brings its own perspective and priorities based on their unique relationship and involvement with AYGS. For example, students may have a more direct experience of the sense of community and the support they received, while parents may focus on the mental health and well-being of their children. School employees may be more attuned to the challenges and resources available, while community/board members may consider the broader impact and cultural diversity aspects. These differences in perception emphasize the importance of engaging and considering the perspectives of all stakeholders when evaluating and improving AYGS. By understanding and addressing the diverse viewpoints, an AYGS can better align its strategies, programs, and initiatives to meet the needs and expectations of all stakeholders involved. It also highlights the potential for collaboration and dialogue among stakeholders to bridge any gaps in understanding and work towards a shared vision of fostering a supportive and inclusive educational environment for HA/GT students at AYGS.

Stakeholders not only described how AYGS helps in community building, but also expressed some concerns and provided certain suggestions on measures to promote support for cultural responsiveness and mental health.

Building a Sense of Community

The sense of community building refers to the process or effort of fostering a feeling of belonging, connection, and shared identity among a group of individuals within a particular community or setting. It involves creating an environment where individuals feel valued, supported, and connected to others around them. This aspect is important in educational institutions, such as AYGS, as it contributes to a positive and inclusive learning environment, encourages collaboration, and enhances overall well-being.

The quantitative findings (see Figures 3 & 4) reveal a favorable attitude among all stakeholders regarding the importance of certain aspects related to the social and emotional well-being and community building among the HA/GT students at AYGS. Building a sense of community among advanced learners was recognized as a high priority by all stakeholders. The survey results indicate that stakeholders strongly agree on the significance of fostering a sense of belonging and camaraderie among students within the AYGS environment. One student stated, “It was a community. ... we talked about the work that was coming up and we did a lot to encourage each other to do more work and helped each other leading up to big assessments and

even on the day-to-day level I think that you build relationships with people when you're put in the same situations" (STU04002).

The data also suggests that various AYGS have implemented strategies and initiatives to foster a strong sense of belonging and connection among their students. For example, multiple schools organize social mixers, facilitate student collaboration in projects, and hold mid-semester meetups and end-of-year presentations. According to the statements from different participants, the sense of community at the schools is highly valued. Students expressed that their schools offer more than just a place to learn, as they provide opportunities to make friends, be ambassadors, and connect with individuals from various regions. One participant said, "It was such a great bonding experience" (STU17003).

The schools' emphasis on proximity, shared interests, and rigorous coursework fostered relationships among students, allowing them to build connections and support one another in their academic pursuits, allowing for additional community engagement. One of the students' comments illustrated this: "A lot of the projects and classes we had there, kind of brought us together, brought us closer, because of the rigor and just because we worked in pretty close proximity to each other and cared about the results of our work" (STU04002). Similarly, some other schools host various campus social events (e.g., Q&A panels, bingo, and trivia nights) for students and alumni, or offer frequent field experiences and benefits from an active Parent-Teacher organization (PTO) that organizes student activities, including summer field experiences, promote collaborative learning through overnight trips to parks for sampling and studying elements. Another school uses art as a tool to give back to the community and encourages students to engage in community service. Participants from certain schools emphasized the collaborative and close relationships among students, teachers, and faculty mentors on a daily basis, contributing to community building. One alumnus highlighted the pivotal role played by the school director in creating a conducive atmosphere for learning and college readiness.

Overall, according to participants, most schools have a positive and accepting environment where students feel supported by teachers and have opportunities to explore their interests. The sense of community and learning encourages lifelong learning and a global perspective. Some participants appreciated the friendships they made with like-minded peers and the positive experiences at school. This suggests that schools nurture intellectual curiosity of their students, aim to promote inclusivity, and offer growth opportunities to all their students. Alumni also highlighted community-building efforts through events like dances and ultimate frisbee tournaments, fostering a sense of belonging. Specifically, the smaller community of some schools led to close relationships among friends. However, the pandemic affected community engagement in some schools, with canceled activities limiting social interaction, which can be considered as a special case. Nonetheless, the schools made efforts to maintain a strong sense of community and support for their students.

Also, due to the physical distance between the sites, some directors acknowledged the challenges in building community. AYGS directors were aware of the need to focus more on community building while capitalizing on the close-knit nature of the school due to their small size. Similarly, one of the schools faced challenges posed by the virtual nature of the program. However, they are actively working to address these challenges by making efforts to foster a sense of community within their classes through such activities as in-person laboratory days. Some of the advantages and activities undertaken by schools to build the community are impacted by class size.

Small Classes Enable Interactions

In the realm of education, the size of a class plays a significant role in shaping the dynamics and connections among students. With fewer students in each class, individuals have the opportunity to establish meaningful relationships with their peers. The intimate setting facilitates one-on-one interactions with teachers, enabling personalized attention and support. This dynamic creates an environment where students feel heard, valued, and part of a close-knit community. One student stated, “Since it was so small it was definitely more of a community” (STU02002). Some schools recognize the importance of fostering a sense of community and have implemented strategies to facilitate the transition of incoming freshmen and promote a supportive learning environment. These schools offer orientation programs and assign dedicated teachers to assist freshmen, ensuring a smooth adjustment to their new academic journey. Additionally, one of the schools has embraced the concept of a community of learners, going beyond academic support. They have introduced support groups like the Big Brother and Big Sister program to further nurture a sense of belonging.

Addressing Pressure and Stress

Navigating the challenging academic journey can often bring about a whirlwind of pressure and stress for HA/GT students, which will be discussed more in the mental health support section later. While some AYGS participants mentioned a high-pressure academic environment and a desire for more emphasis on personal growth, the overall perception of the community and learning environment was moderately positive. The supportive nature of teachers and the positive learning environment were highlighted, with students expressing how they supported one another through challenging curriculum and shared opportunities. The activities and initiatives implemented by these schools not only foster a sense of community but also serve as effective strategies for addressing pressure and stress among students. The support system established through transition programs, support groups, and personalized attention provides a safe space for students to share their challenges and seek guidance. Furthermore, socialization opportunities and community events can also create avenues for stress relief and promote emotional well-being. By nurturing a supportive and inclusive environment, these schools empower students to overcome pressure and stress (that we will see with the help of the

participants' perceptions in the next section on 'Mental Health Support'), enabling them to thrive academically and personally.

Combined Activities

Some schools also stand out for their emphasis on a collaborative learning environment, where students actively engage in specific events to cultivate teamwork and leadership skills. Participants praised the schools' academically driven community, where students taking the same classes collaborated on study guides, worked on class-wide projects, and motivated each other to excel. A parent stated that their child "enjoys the rigor, as well as working with students who have a similar high-level of interest in very advanced schoolwork" (PAR230270). Through combined activities, these schools create a powerful sense of unity and support, fostering bonds among students that extend beyond the classroom. Students learn from one another, appreciate diverse perspectives, and develop vital interpersonal skills. Another parent said, "I honestly feel they helped each other, pushing each other to master understanding of the topic at hand and working together to accomplish common goals" (PAR230552). This commitment of some schools to combined activities not only enhances academic understanding but also nurtures a community where collective achievement is celebrated and personal growth thrives.

Promoting Culturally Responsive Support

In today's diverse educational landscape, it is essential to prioritize cultural responsiveness when supporting HA/GT students. By recognizing and addressing the unique needs, backgrounds, experiences, and perspectives of HA/GT students, educational institutions can create an inclusive and empowering environment, thus supporting all students to thrive academically and emotionally. In the survey, stakeholders expressed a shared belief that it should be a priority for AYGS to effectively support the culturally diverse needs of HA/GT students in the Commonwealth. The survey results indicate a recognition of the importance of creating an inclusive and culturally responsive educational environment (Figures 3 & 4). Stakeholders often emphasized the significance of providing support that addresses the diverse needs, backgrounds, experiences, and perspectives of the student population at AYGS, though the level of agreement among stakeholders differs significantly^{17,18}.

Nevertheless, the lack of diversity among faculty members was identified as a limitation, and there was a call for increased cultural competence among teachers, especially those who are predominantly white and female, to better understand and support the culturally diverse needs of students. Students and parents expressed the need for more teachers from diverse backgrounds in decision-making roles. Additionally, there was a call for increased cultural diversity and inclusion in the AYGS to ensure a welcoming and supportive environment for all students. Some stakeholders discussed how there were "racist and sexist staff" (MUL230045) at some schools

¹⁷ Kruskal-Wallis H test: ($\chi^2[5] = 15.19, p < .05$)

¹⁸ Kruskal-Wallis H test: ($\chi^2[5] = 12.43, p < .05$)

and students “experienced what they described as micro aggressions toward them within programming” (SE230511) thus highlighting the importance of “addressing not only cultural diverse needs but [also] financially diverse needs” (MUL230045).

One of the schools collaborates with alumni and strives to create a welcoming and respectful environment for all students and is aiming to hire a part-time DEI person (Diversity, Equity, and Inclusion). Students feel that diverse perspectives and experiences could contribute to a better understanding of mental health needs and more effective support. Some comments also highlight the need for cultural sensitivity and inclusion in mental health support. Students from racially and economically diverse backgrounds may feel unsupported or neglected. There is a call for addressing culturally diverse needs alongside mental health needs.

Mental Health Support

The mental well-being of HA/GT students is a topic of growing concern within educational communities. While these students possess exceptional talents and abilities, they also face unique challenges and pressures that can impact their mental health. Recognizing the importance of addressing these needs, there is a growing emphasis on providing comprehensive and effective mental health support tailored to the specific requirements of HA/GT students. With the help of the survey, there was a consensus among stakeholders that it should be a priority for AYGS to effectively support the mental health and well-being of HA/GT students (Figures 3 & 4). One may assume from the responses that there is a collective understanding of the unique social and emotional challenges that these students may face. Stakeholders often acknowledged the need for appropriate resources, programs, and support systems that address the mental health needs of students, ensuring their overall well-being and promoting a positive learning environment.

The qualitative data suggests that comprehensive and continuous mental health support is a pressing concern raised by many stakeholders in the context of HA/GT students. A notable limitation identified is the absence of mental health professionals or counselors dedicated specifically to the needs of the AYGS community. The consequences of this gap are evident in specific instances where students' mental health has been adversely affected, resulting in anxiety, depression, self-esteem issues, and, alarmingly, even suicidal thoughts. The absence of appropriate responses to these challenges and the potential long-term impact on students' academic and personal lives were key points of concern. Stakeholders emphasized the need for more resources, funding, and staff to address these mental health issues effectively. Echoing the comments of many other participants, one student emphasized,

There [were] some thoughts on mental health within the school system. But as [time] went on, less and less thought [was put] into students' mental health. Being the subject that it is, I think that it should be seen more within the school system, especially within governor schools. With the heavy workload, I feel like teachers don't think about the

outside life [that] we are living away from the school. More attention should be brought to the mental health subject (STU231026)

Moreover, there are indications that teachers and staff may lack understanding and empathy toward the mental health challenges faced by HA/GT students. Insufficient recognition of warning signs, inadequate accommodations, and a lack of support for students grappling with mental health issues were among the concerns raised. Suggestions were put forth by several participants to provide education and training to teachers and staff, equipping them with the knowledge and tools to address mental health issues effectively. The impact of academic pressure and competition on the mental well-being of HA/GT students is particularly noteworthy. Representing several other comments by various stakeholders, a parent noted, “[the students] often put pressure on themselves to strive for perfection in everything they do, from academics to extracurriculars to sports” (PAR230243). This creates high levels of stress, burnout, anxiety, and depression experienced, which underlines the necessity of instruction in study skills, time management, and coping mechanisms. One parent said, “Several of the 10th grade teachers put a very heavy load on the kids and do not support them at all...It has taken a very heavy toll on the mental health of both my children who currently attend [an AYGS]. And with that much homework they have to choose between sleep or a social life” (PAR230399). Many parents had similar responses, thus bringing attention to the support required by the students. To this point, stakeholders emphasized the importance of destigmatizing mental health issues and increasing teachers' awareness of warning signs exhibited by struggling students. By promoting a more compassionate and informed approach, educational institutions can better support the mental health needs of HA/GT students.

Conclusion

The data and feedback from stakeholders regarding the level of support within Academic Year Governor Schools (AYGS) reveal both areas of strength and areas for improvement. While there is a shared belief among stakeholders about the importance of creating a sense of community and effectively supporting the mental health and well-being of HA/GT students, there are notable differences in perception among different stakeholder groups. The findings emphasize the importance of ongoing efforts to enhance the level of support and address the diverse needs of HA/GT students in AYGS. Collaborative initiatives, cultural competence training, and continuous evaluation can contribute to creating an inclusive, supportive, and thriving educational environment for all students in AYGS. By prioritizing community building, mental health support, and cultural responsiveness, AYGS can better meet the needs of their HA/GT student population and foster their academic and personal growth.

While all the stakeholders recognize the significance of building a sense of community, there is room for improvement in supporting the mental health and well-being of students, as indicated by several points of data. This highlights the need for increased resources, staff, and training to address mental health concerns effectively. Furthermore, supporting the culturally

diverse needs of HA/GT students is seen as a priority, but there are varying levels of effectiveness reported by different stakeholder groups. The data clearly suggested a greater need for cultural sensitivity, inclusivity, and diversity among faculty members to provide a supportive and inclusive environment for all students.

Recommendations

1. There was consensus among stakeholders that AYGS are valuable and provide a needed educational opportunity to HA/GT students. This strong support can be built on to expand access to qualified students across the Commonwealth by increasing communication about the AYGS with families, school divisions, and decision makers.
2. Support for the well-being of AYGS students was a concern among numerous stakeholders. These concerns could be addressed by allocating additional resources, funding, and staff specifically for mental health support within AYGS. Mental health professionals or counselors should be knowledgeable about the unique needs of HA/GT students. AYGS can also implement preventive measures, early intervention programs, and awareness campaigns to address mental health concerns proactively. Partnerships with mental health organizations, research institutions, and community service providers can enhance the support network available to students.
3. While there was general agreement that the AYGS support their students effectively, regular and comprehensive professional development programs to enhance understanding of giftedness, social-emotional well-being, and culturally responsive practices for teachers, staff, and administrators can maintain and enhance this support.

Chapter 4

Need and Demand for Additional AYGS Programs and Slots

The provision of Governor's School curriculum during the academic year is a rarity in the United States, and Virginia is to be commended for its pursuit of rigorous academics under this format. Thousands of students are served annually through AYGS programs, with strong outcomes in terms of advanced learning, college matriculation, community support, and student feedback regarding the experience.

However, there is a sense among participants in this study that in most places, many students who would benefit from a governor's school education are not being found or admitted. It is a natural response to this condition to consider developing more AYGS programs, as additional programs would inherently promise more available slots for students. In addition, new programs could be offered in complementary locations, reducing transportation challenges. Finally, they could carry out the option of new curricular areas for students in the region.

Importantly, all three of these growth areas (number of slots, locations, curricular options) are also available through expansion of existing programs, which sometimes administer multiple campuses and multiple curricular foci. For the purposes of this section, therefore, we will consider the possibility of establishing new programs together with the possibility of expanding existing programs. The question of new curricular foci, also available under both paths, will be treated in a separate section (see Chapter 6).

Support for More Students to Attend

When considering how to improve student access to AYGS programming, it becomes increasingly clear that there is broad demand for more students to attend. Survey respondents were heavily in favor of delivering the AYGS experience to more students, with 63% agreeing that more access is needed (Figure 5).

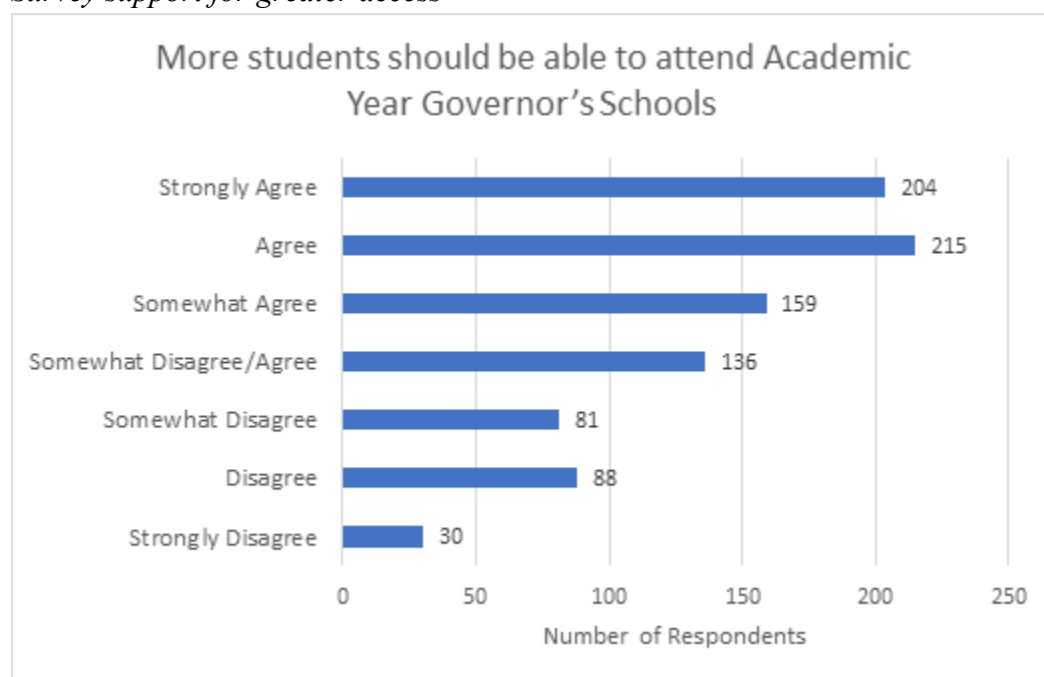
When survey respondents were prompted for further comments "about access to Academic Year Governor's Schools," more than 140 voluntary comments were offered recognizing the low number of admitted students and supporting expansion of service. Representative responses follow:

- "The main barrier to access is simply the size of the school is not large enough to accommodate the quantity of gifted schools in the area and as a result there are students who are left out who otherwise would be qualified for the learning experiences present at [my AYGS]." (STU230590)

- “Unfortunately, there are only so many spots available and they are handed out by school not district. This results in some gifted students who want to attend and could benefit cannot.” (PAR230753)
- “There are a very limited number of slots for [my AYGS] - not nearly enough to make it accessible for all students who would benefit.” (PAR230851)
- “Student slots are limited by the division resources allocated toward them.” (SE230511)

Figure 5

Survey support for greater access



The majority of AYGS directors were in agreement that there are qualified students left unserved by AYGS programming under current identification, admissions, and funding mechanisms. Four directors indicated that they were in a comfortable place meeting perceived demand, though this perception was conflated with the inability of feeder schools to fund more participants. The other fifteen all had a sense that there were students in their region unable to attend.

Importantly, the number of slots available to students is only one of a set of factors that limit access for qualified participants. Between interview data and the open responses provided on the survey, it becomes clear that a sequence of concerns must be navigated to successfully apply for and attend AYGS programs. Each step represents a potential off-ramp for qualified students, and attention paid at each step could promise appropriate education for more Virginia students.

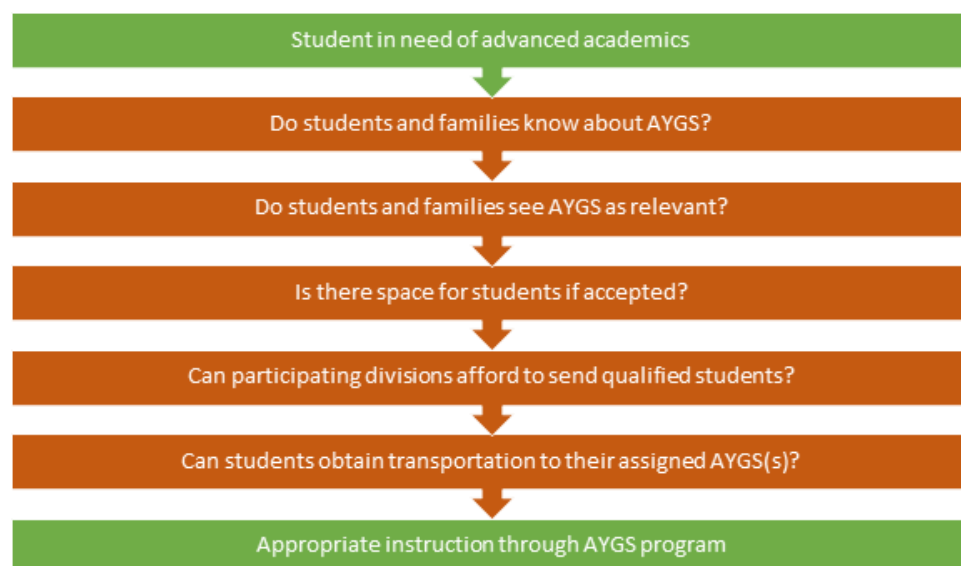
Obstacles to Access

There are several obstacles to AYGS participation for qualified students and addressing one will be ineffective if others are left without attention. Interviewees point to difficulties with community awareness and getting information to potential applicants. In addition, distance and transportation often stand in the way of otherwise qualified students, while programs are still recovering from losses in participation due to a move to pandemic virtual format. When discussing the need and demand for additional slots and programs, it is important to understand the series of obstacles between students who would benefit and the services being offered.

Figure 2 is a summary of the obstacles indicated by participants in the study. Each step is detailed briefly below, after which the idea of new programs is offered as one of several possible solutions to minimize these challenges.

Figure 6

Obstacles to Access



Do Students and Families Know About AYGS Programming?

Respondents and interviewees across all data sources indicated that AYGS programs suffer from a lack of awareness in possible candidates. When solicited for voluntary comments on access to AYGS programming, there were 49 responses on the survey specifically addressing the need for more communication of AYGS options to potential participants. Students representing five different AYGS programs had the following to say:

- “While presentations about the [...] governor’s school are open to all students, they are primarily presented to students already in gifted classes. This often leaves many high achieving students uninformed about the opportunities open to them.” (STU230855)
- “It isn't advertised well in my county and some counselors discourage going to it.” (STU230087)
- “Many... students hear about the program from prior students or friends which is great, but there's a subset of high-ability and gifted students at these high schools and in those AP classes that do not learn about [the AYGS] and how it could benefit them until it is too late to apply.” (STU230423)
- “In terms of accessibility to applying/attending regardless of race or other factors: many students at my base school did not know what [the AYGS] was and wouldn't have been recommended or given the resources to apply because of that. Our gifted programs are very white and middle/upper middle class.” (STU230217)
- “[...] only students who were in the Gifted and Talented program were offered the application to apply. I was given the application after asking for it, but I didn’t know it was available until it had been out for about a month.” (STU230771)

These sentiments are repeated in other terms, and regarding other AYGS programs, in comments from parents, school employees, board members, and community members at large. There is also a concerning subset of comments indicating that school counselors might be advocating against participation in AYGS programming at some sites.

Increasing access to AYGS through new programs and increased numbers relies, at least in some regions, on equitably informing potential candidates. This may involve finding new venues for outreach, translating materials for ELL families, and building stronger relationships with guidance counselors in feeder schools. Importantly, AYGS directors shared about their extensive strategies for recruitment and how much of their administrative energy is spent visiting participating schools and providing education to parents, teachers, and counselors. Expansion of recruitment efforts may need to be supported outside of, and in addition to, this existing work.

Do Families See AYGS as Relevant?

Even given sufficient communication of the AYGS option, it is likely that qualified students who would benefit from the programs may not see it as a viable path. This concern was not overtly raised by respondents, but it arises from a combination of recently mandated diversity reports, director comments on these reports, and respondent comments regarding racial and economic diversity. Taken as a body, these data sources present a familiar image in gifted education of programming that is uninformed by the perspectives and needs of marginalized communities.

Concerns regarding underrepresented populations often focus on discrepancies in test performance and selection criteria. However, there is also an issue of limited relevance in the context of non-dominant cultures: relevance of curriculum, relevance of outcomes, relevance of scholastic community (DeVries & Golon, 2021). Studies of advanced academics among non-dominant cultures highlight the fact that decisions regarding testing, curriculum, and format all carry the cultural values of those who make them (Bevan-Brown, 2005; Lawrence, 2009). In the case of Virginia Governor’s Schools, those values are inevitably reflective of a demographic profile now lost to history. Access to AYGS programming may be challenged, in part, because the nature of the learning experience does not match the vision of a future (e.g., college matriculation, or a high-paying job) for the next generation of advanced learners.

Open survey comments on AYGS access reflect this concern, adding a level of specificity that will be helpful in evaluating solutions. In comments volunteered from parents, school employees, and community members, several themes emerge. There is a sense that students of color are less likely to experience the academic preparation necessary to qualify upon entering high school, and that they are therefore less likely to apply. Participants also express concern about support for these students within the programs themselves. Whether this is substantive or a problem of perception, the idea of AYGS programming as an “elitist environment” can only work against broad application and admission. The following direct quotes highlight the powerful interaction of these factors:

- “[The] Public Schools need to do more to ensure that Black and Brown students are able to apply, are qualified to get in, and understand the value of attending [AYGS programs]. [They] also need to provide support to ensure Black and Brown students will be successful at the two governor's schools.” (PAR230106)
- “The program needs more publicity to a diversity of students. Many advanced students and their families are unaware of it. We need increased outreach to families with high poverty, little background in academics, and other marginalized groups.” (PAR230777)
- “Barriers for traditionally marginalized groups are not being overcome AT the governor's school. High ability students from Black and Hispanic families and low SES families do not have access to support structures that would allow them to be successful. In addition, the social capital to even apply to the governor's school prevents them from even getting a look.” (SE230201)
- “Many minority students do not even apply, except for Asian American students. Governor's school has created an elitist environment that does not serve the community needs, but only the needs of a select few.” (SE231061)

- “I believe there are academic barriers prior to the time it comes to apply to governor’s school that prevent students from marginalized populations from applying and participating in regional governor school programming.” (SE230479)
- “There is a process for kids to get into the program, but not really focused on all backgrounds -- diversity, equity and inclusion appear to be a challenge -- not all students are embraced in the same [way] as others.” (OTH230682)

Increasing the voices of excluded students and their families in reviews of both logistical and curricular affairs could be a simple solution to seeing a wider array of talented learners in AYGS programs.

Is There Space for Them?

In addition to identifying and recruiting students who would benefit from AYGS programming, programs face the dual challenges of space and money. At least 14 of the 19 AYGS programs are filling every seat currently available to them, sometimes in multiple buildings, and they have no choice but to turn away qualified candidates. One more program has adequate space for now, but the director anticipates an issue in the coming years due to a rapidly growing county. Five programs felt they had found a balance with which they could be happy, though they would serve more students if the money were there.

While admission rates differ by school, and several programs indicated they turned away only a few students, there are also some extreme cases of selectivity. One AYGS receives 1100-1300 applications per year for 180 seats, while another reported turning away about three students for every student admitted. The loss in developed capacity is powerful to consider.

Can Their Divisions Afford to Send Them?

The corresponding concern to whether there are enough seats to allow more students to attend is whether that student’s home school has money to send them. Advanced academic programs are often resource-intensive, especially in STEM fields. AYGS programs, however, are funded under a different model than feeder schools, often resulting in “shoestring” creativity to deliver quality instruction. While the budgetary model for AYGS programs is considered in more detail in Chapter 5 of this report, it is important to bookmark funding as perhaps the most fundamental restriction to student participation.

Six AYGS directors specifically pointed to issues with division funding priorities. Many of these leaders described being in a “difficult position” of selling the program to participating school districts. Their power to advocate for higher fees is limited by the power of participating divisions to simply reduce participation, leaving the AYGS with less funding than before. One director framed the issue clearly:

I would see us grow before I'd add more schools. Better support, better money, consistent financial models. Because that's been something. As the tide flows with various people in Richmond, it seems to change what they're willing to give to us or how they're viewing our funding models. Sometimes we're an afterthought. It's weird and it's a little frustrating when you hear that, especially schools that have perhaps smaller school divisions... and their fiscal model is a bit more challenging. But there's inconsistency and it just seems a lack of understanding of what we do and how hard we're working to keep this open to a lot of folks. I don't think it's more schools, I think it's better funding and more consistent funding in alignment with what they're doing with other schools. I think the 19 of us are doing some pretty really amazing things, but they got to get this funding model worked out where it's equitable and it's fair. (DIR1360)

Ultimately, all paths of inquiry ultimately lead to sufficient funding. It is clear from our research that most of the AYGS programs operate on tenuous financial support, constantly problem solving to provide best programming for existing students. Any effort to expand seats or develop new schools without first providing a solid and reliable foundation to existing programs promises dilution of existing service and sustained difficulties for administrators and educators.

Can Students Access Safe Transportation?

An issue that arose repeatedly from all respondents was transportation to the AYGS programs. About half of the AYGS directors cited transportation as a problem at some level to be negotiated by students and their families. Three directors indicated transportation as a primary challenge to participation, citing bus journeys up to ninety minutes in length and early morning/late night driving conditions during the winter. These issues are particularly bothersome because they are inherently a greater challenge to rural and low-SES populations, exacerbating an already existent inequality in identification and service.

Participating parents and school employees had the most to say on the survey about transportation to schools as an access issue. There were 72 voluntary responses regarding this difficulty, highlighting long days, incompatibility with family responsibilities and work schedules, and safety concerns. These can be seen in the sample of responses below:

- “I have to drive my child to [the] high school between 7:30-7:45 am to get a van to the [AYGS] and I pick my child up at [the] high school around 3:55 pm. There is no opportunity for my child to wait anywhere (other than the van) if I cannot be there on time. This schedule is not workable for many families. It is difficult for my family.” (PAR230518)
- “The school our students attend is 40+ minutes away. This means that students need to be here at the school to catch the bus before our school day begins. So students have to secure transportation early in the morning to the school in order to get on the bus to the

governor's school. Not all of our students are able to drive, have family members who can bend their schedules to bring them or even have reliable transportation.” (SE230482)

- “Travel time and transportation are major barriers especially to students who are caregivers for younger siblings at home.” (MUL230989)

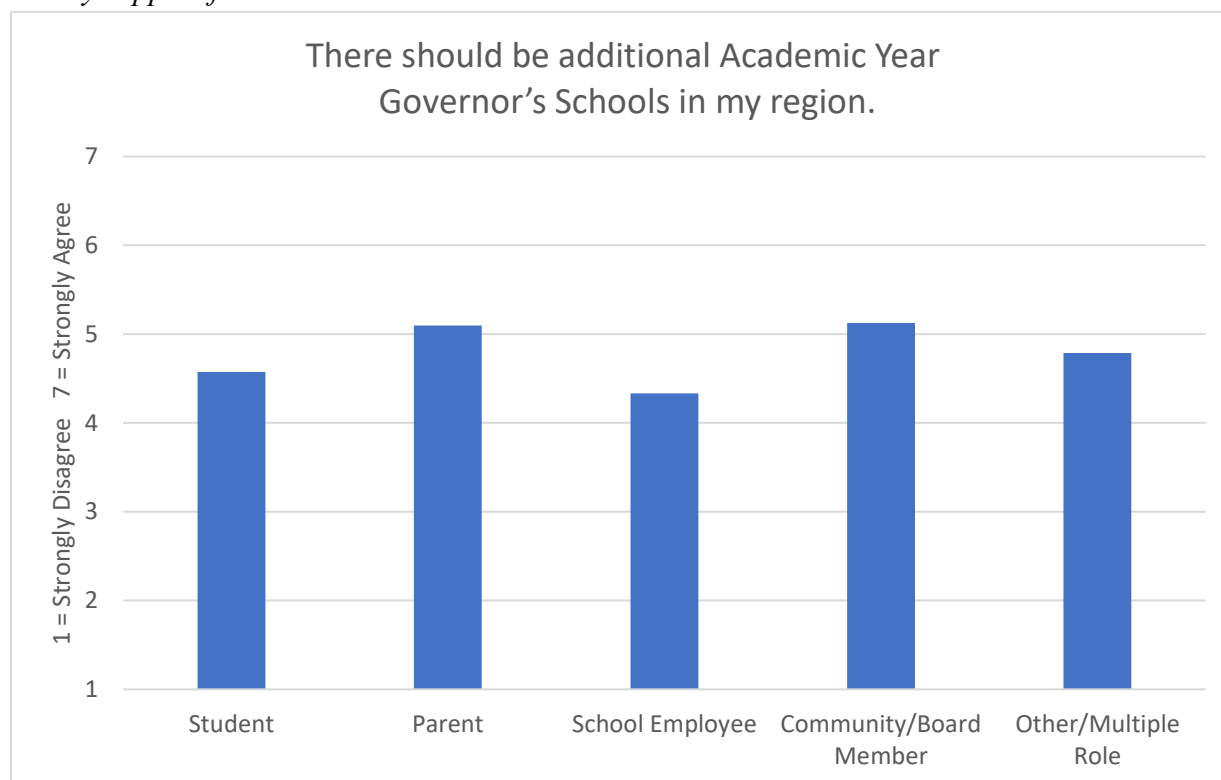
Support for students and programs to mitigate this issue would be welcomed by these communities. This could be in the form of more support for busing, or possibly in the onboarding of additional sites to increase proximity to home schools.

Stakeholder Perspectives on Additional Programs

Interviewees and survey respondents had mixed feelings on the idea of new Academic Year Governor’s programs being introduced. This was, in part, due to differing ideas on what that might mean. The concept of a new AYGS was interpreted at times by different stakeholders as a new facility under different administration, another campus administered under the leadership of an existing AYGS, the adoption of another schedule within an existing AYGS, or simply the addition of another curricular focus within an existing AYGS. Support for each of these options varied according to stakeholder subgroup.

Figure 7

Survey support for additional schools



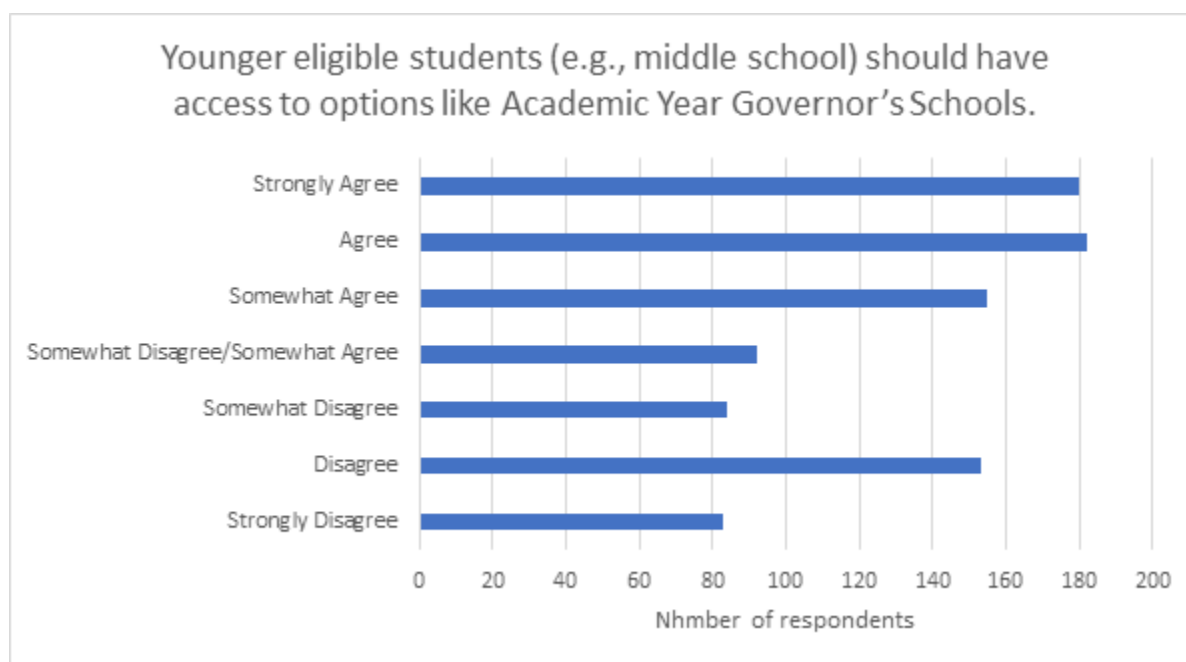
AYGS directors were largely in favor of expanding existing programs instead of developing new ones. Interviews with the majority of directors indicated that given sufficient funding, they felt capable of growing into more or larger facilities and providing instruction in multiple curricular areas, if it met the needs of the community. Other survey respondents were more eager to see the development of additional schools (Figure 7). Again, this support may be for new facilities, new curriculum, and/or more available slots. This support was reflected in more than 100 responses involving a call for additional schools.

On Middle School Programming

There was a strong sense among survey respondents that younger students could benefit from a similarly focused program, and that advanced academics could successfully be extended to the middle school level (Figure 8). Implementing advanced programming at earlier ages would certainly have positive effects on the academic preparedness of more students to apply for and enter AYGS programs in high school. It could also improve awareness of AYGS options among students and families, depending on format.

Figure 8

Survey support for younger students in programs



However, expanding service to younger students needs to be carefully considered. Several survey respondents made remarks about the intensity of the AYGS curriculum, raising questions about the ability of younger students to succeed in the model as it is currently delivered. If expansion of access is accomplished by allowing younger students to participate, a review of developmentally appropriate pedagogy and curriculum would need to be performed.

Similarly, it would be possible to develop AYGS analogs at the middle school level and continue to fall prey to the same limitations described throughout this section. Issues of community awareness, cultural relevance, and transportation can still be encoded in additional programming if efforts are not made to address them. Otherwise, there is a risk of earlier efforts serving only to prepare a similarly narrow pipeline of students, increasing the number of years current students participate instead of increasing the number of students participating.

Conclusion

Virginia families and educators are in support of giving more students access to Academic Year Governor's Schools. Support was strong in the survey for both additional programs and the expansion of existing programs, though the current directors saw more wisdom in the latter path due to efficiencies and the flexibility of the curriculum. In addition to increasing the number of possible slots in programs, the Commonwealth could also benefit from improving community awareness, promoting cultural responsiveness, and addressing transportation concerns.

Recommendations

1. A convincing majority of respondents in this study, across all stakeholders, supports the expansion of AYGS services to more students. Students and families who participate in the schools are having good experiences, and they want to see more learners have the opportunity. We recommend expansion of service through increased funding and new AYGS sites.
2. The AYGS system in Virginia is a unique and powerful approach to providing a rigorous education for students in need. It is challenged, in the way that advanced academics across the nation are commonly challenged, by a tendency to serve a limited selection of eligible students defined by race, language, and socioeconomic status. We recommend continued, meaningful efforts to expand service to a greater diversity of learners.
3. While directors are working effectively with boards and staff to provide strong programming, these stakeholders may have limited access to the voices and needs of underrepresented populations. We recommend an overt effort to find and include advisors from communities often excluded from advanced academics (e.g., Latinx populations, recent immigrants, populations experiencing poverty).
4. Transportation to programs is an overriding issue. We recommend offering financial and logistical support to directors in an effort to mitigate transportation concerns, perhaps through a combination of more comprehensive busing and strategic planning of new school sites.
5. Respondents agree with published best practice in their call for earlier programming in advanced academics. Increased attention on middle school services, delivered to a broad selection of students, would aid in more comprehensive identification of talent, increase

community awareness, and mitigate unintended gatekeeping due to early trajectory course selection.

Chapter 5

Examining Costs and Timelines of Implementing New AYGS

Researching a response to this question required a careful analysis of the Governor School Directors' experiences as leaders of their AYGS, Regional Board Chairs' perspectives, plus a study of the funding examples in particular settings with their actual instructional organizational designs, including use of technology to deliver instruction, within the various locations/settings of the schools, and specific busing needs of each location. We also carefully studied the two reports circa 2014 Secretary of Education Report *Academic Year Governor's Schools Funding Formula Study* and the 2016 Virginia Department of Education Report *Review of Academic-Year Governor's Schools Program Funding Formula*. These reports provided thoughtful descriptions and ideas about how to make adjustments to the funding formula offered to support the AYGS. Consequently, all these data must be understood within the context that the actual school budgets end up being quite impacted by the details of an individual school's location geographically, the model of the school, curriculum emphasis (e.g., STEM, Arts), physical space that the school inhabits, approaches taken to deliver instruction, school size, and other variables.

The two studies of AYGS funding (VDOE, 2014, 2016) reveal that the state's funding model for AYGS has some limitations and awkwardness that makes the role of the Directors more complicated and somewhat unpredictable. Additionally, the current funding model affects the schools differently because their conditions vary so much. For example, some schools have buildings that must be kept functional (an independent financial model). In other locations, AYGS rely on rented space or negotiated space in community colleges (partnership or shared resource model). In interviews, the AYGS directors expressed a great deal of appreciation for the value of the AYGS in the development of talent of their students, but they also described a funding formula that was somewhat problematic. They described adaptations they have learned how to make so the funding model could work for them given the details of their particular school. The directors have worked hard to effectively use the funds that are available but are hopeful that a more effective funding model can be implemented. We learned that this same concern has existed for years, preceding the terms of most current AYGS Directors, and seemed to be the predicate for the two studies cited (VDOE, 2014, 2016). Because of the longstanding expertise and relative effectiveness of the directors' successful negotiations of the current funding model, we are cautious about recommending changes to the budgeting model used to fund AYGS without holding harmless the current budgets until a more beneficial budgeting process can be put in place. Therefore, we encourage the development of a more efficacious funding model that will provide the greatest impact for the AYGS programs.

Establishing a New AYGS Program

As of 2023, there are 19 AYGS that vary in important ways. For example, the Thomas Jefferson High School for Science and Technology has its own building and faculty, is a full-time learning environment, serves students in grades 9-12, and is the largest of the 19 schools with more than 1800 students. The smallest AYGS, Jackson River, with 21 students in grades 11 and 12, in a single location, uses a shared-time AYGS model and has a budget of \$45,805. There are four all-day AYGS (Appomattox Regional Governor's School for Arts & Technology, Governor School for the Arts¹⁹, Maggie L. Walker School for Government and International Studies, Thomas Jefferson High School for Science & Technology with the largest budget of \$4,369,034). There are 16 shared-time AYGS, one which is virtual with some in-person meetings (A. Linwood Holton Governor's School). Many of the schools focus on students in grades 11 and 12 ($n = 9$), while others provide for students from grades 10-12 ($n = 3$), and others offer grades 9-12 ($n = 7$). The school regions range in geography from densely populated urban areas to mountainous regions with relatively sparse populations.

A conclusion drawn from an analysis of these AYGS is that there are some similarities and many differences across the schools that make providing a one-size-fits-all recommendation about the cost of creating a new AYGS ill advised. Consequently, a series of observations will be offered that reflect the needs of the current schools relative to having adequate and stable funding, plus how to proceed if the current schools want to/can grow by adding to their student headcount and increasing the possibility of adding new schools. Estimation of potential timelines for implementation of new AYGS is informed by the VDOE procedure developed to create new programs (VDOE, 1998; see Appendix D). This procedure has been used for 25 years to create new AYGS. Within the following description are several important details that characterize the qualities and goals of an AYGS:

- The AYGS are to serve high school age **students who are of high academic ability**.
- The schools are **academic year long**
- Offer special educational opportunities in **several academic subject** areas.
- Their overall experience is to **provide well-balanced instruction** between the combination of the base school and their AYGS.

¹⁹ Note this school is considered full day despite students receiving instruction from two school locations. This special designation is due to the school's curricular focus on the arts and the fact that it requires students to attend activities, practice sessions, and performances in the afternoons and evenings.

- Each AYGS will establish a “**Community of Learners,**” defined as a place where students have **close relationships with faculty members and peers** in a manner that stimulates growth and intellectual development.
- Each AYGS will create **meaningful and challenging educational experiences** that match the unique needs and characteristics of gifted learners.
- Students **will use current laboratory facilities and computer technology** to conduct in-depth research.
- **Access to leaders in government, business and universities** is important (adapted from VDOE, 1998)

The details bolded in the description above are the essential ingredients of an AYGS. Any proposed new program would need to incorporate these qualities. The VDOE guide included in Appendix D offers guidance in how to implement a proposed new AYGS program. Considerable detail is provided to assist interested parties in creating a new AYGS. The VDOE recommends a timeframe of 6 to 12 months to complete the extensive planning and discussions among the participating school divisions to produce a program with the necessary characteristics. This timeline applies to all new AYGS.

From this information, it is evident that any new AYGS could have widely varying costs, depending on a number of decisions related to the program’s makeup. One of the most important decisions affecting cost will be the school’s structure. For the purpose of this report, there are three current AYGS models in Virginia, which can be analyzed by how their structure impacts financing and fiscal stability. These models are listed below from the most expensive to least²⁰.

1. Independent

- Stand-alone physical plant, dedicated FTEs (full-time equivalents) and support staff, independent asset and expense allocations.

2. Partnership

- Physical plant is independent but may be located on a community college campus or high school campus (city-owned property), dedicated administrative and instructional staff as well as technology and resources.

²⁰ Special Considerations: 1) Many of the AYGS have unrestricted and restricted ‘cash and asset donations’ in the form of revenues generated within their non-profit foundations used for the purpose of mission-driven spending, student support and scholarships. 2) Even without the expenses of physical plant, depreciation, capital assets and fixed expenses (overhead), instructional staff (FTEs) are the largest expense for any AYGS, particularly if the staff are dedicated rather than shared with a primary site. Sharing staff with another site allows for cost sharing of benefits, pensions, employer-sponsored health insurance premiums, and other human resource-related expenses.

3. Shared Resources

- Program is located inside a current high school or college (non-independent physical plant), support and instructional staff are shared with the high school or college, minimal overhead and fixed expenses. This model includes the single virtual model at A. Linwood Holton.

Decisions regarding the structural model to be implemented will be made by the partnering school divisions and parties interested in creating the new AYGS. Once these decisions are made, other considerations will affect the cost. For example, transportation costs will vary depending on the location of the AYGS in relation to the students it serves. The curriculum selected may impose certain costs, such as a laboratory or a special dance floor, for example. This may not be an additional cost, however, if the AYGS shares space with a base school or college that already has these resources. The number of students to be served will affect potential costs, as well. An AYGS with only a few students will not have an economy of scale to function beyond the absolute minimum. This will be too low to effectively support the costs of labs, textbooks, and equipment needed for high-level instruction. On the other end of the spectrum, too large a student body challenges space resources and comes with costs that would not apply to a smaller school. Estimating potential costs for a new AYGS is not possible without knowing many of the characteristics of the school. Table 5 includes the costs of existing AYGS, suggesting the wide range of possible costs.

AYGS Financial Structure

When attempting to estimate costs of a new AYGS, it is critical to understand the financial assumptions of the model used to fund the current AYGS. The current financial structure is based on the following:

- A variety of revenue finances the operation of the AYGS programs. The Virginia General Assembly, through VDOE and the participating school divisions, fund these programs. AYGS are funded through the Virginia General Assembly with an additional amount, commonly referred to as “the Governor's School add on.” This funding to AYGS is provided in addition to an appropriate share of participating divisions’ basic student allocation for their AYGS students.
- The school board of the participating city or county allocates a specific amount of “tuition” per student per governor’s school. Tuition is decided by the regional governing board of each AYGS program.
- Each AYGS has a fiscal agent. Typically, the school division in their central location serves as their fiscal agent. Each AYGS has its own operating budget, expenses, and assets. Individual AYGS operate under the comprehensive umbrella of their participating

Table 5*AYGS Structure and Funding*

AYGS Program	Program Length*	FY2023 Enrollment	FY2023 State Share Funding
A. Linwood Holton GS	5/6	317	\$1,215,673
Appomattox Regional GS	1	374	\$1,507,139
Blue Ridge GS	1/2	635	\$974,990
Central Virginia GS	5/6	149	\$530,781
Chesapeake Bay GS	5/6	218	\$620,639
Commonwealth GS	1/2	597	\$1,228,636
Governor's School for The Arts	1	382	\$1,572,331
Governor's School at Innovation Park	5/6	163	\$549,227
Governor's School of Southside Virginia	5/6	176	\$610,512
Jackson River GS	1/2	21	\$45,805
Maggie L. Walker GS for Government & International Studies	1	772	\$2,758,190
Massanutten Regional GS	5/6	79	\$267,409
Mountain Vista Governor's School	5/6	205	\$573,375
New Horizons GS For Science & Technology	5/6	189	\$597,231
Piedmont GS for Mathematics Science & Technology	5/6	145	\$590,732
Roanoke Valley GS	1/2	245	\$501,949
Shenandoah Valley GS	5/6	236	\$782,195
Southwest Virginia GS	5/6	101	\$364,511
Thomas Jefferson High School (All AYGS enrollment for funding is capped at 1800 students)	1	~1,800	\$4,369,034

*Program Length represents the proportion of the entire school day that students attend their AYGS. School funding is tied to this calculation.

city or county school boards and the allocation of “revenue” is simply shifted from one cost center to another (the assigned school AYGS).

- Most of the AYGS are attended part-time and the students return to their base school for general education core classes. Therefore, the assigned base school still incurs expenses per student, such as nutrition services, physical plant, operations, transportation, FF&E (fixtures, furniture, and equipment), and support staff expenses. In addition to staffing expenses, much of the additional expense of an AYGS lies here; expense allocations that are essentially doubled and each school, both the assigned school and the AYGS, incur an expense per student. Sending 10 students per school will not yield a change in fixed expenses for the assigned school and the AYGS incurs an expense as well (e.g., utilities, operations, support staff, supplies, physical plant).
- While the current model is a form of revenue shifting from one school to another, the expenses incurred do not vary significantly from the home school to the AYGS on a per-student basis. It is important to note that, while funds per-student are divided, the cost of educating a student at their home school and the AYGS program are often incurred at the total per-student funded amount for both places.

Critique of the 2023 AYGS Funding Model

The current AYGS funding formula is not based on any specific staffing or cost standard that relates to best practice or actual costs needed to operate the AYGS program. Consequently, the current formula does not adequately reflect the actual costs of operation and the programmatic and staffing needs of the programs. AYGS programs are occasionally, but not always, included in certain state Direct Aid funding streams that support significant K-12 operational costs such as Virginia Retirement System, health care premiums, teacher pay increases, and textbooks. Typically, state funding for the 19 AYGS supports just over 25% of the operational costs of the programs overall, while state support for public schools generally is significantly higher at approximately 45%. For most AYGS programs, state revenue is basically 25% of the program’s total revenue, Local Education Agency (LEA) tuition contributions total 50% of the revenue, and other/miscellaneous revenue (grants, foundation support, student fees) accounts for the remaining 25%.

In 2014, the General Assembly directed the Secretary of Education to conduct an AYGS Funding Study to identify alternative funding models for the AYGS. Nine funding options were generated through the study which involved VDOE staff, AYGS parents, AYGS directors, participating school division personnel, and superintendents from non-participating school divisions (See Appendix E for a copy of this report) The VDOE selected a funding option aligned with funding formulas utilized by the Standards of Quality (SOQ) to fund high schools. This funding option provided a base per-pupil amount for support costs based on support funding provided in SOQ Basic Aid, as well as instructional staffing funding based on SOQ Basic Aid

instructional staffing standards. Support costs included salary and non-salary items such as substitutes, school nurses, support salaries (e.g., administrative, operations & maintenance, support technology, etc.), and nonpersonal expenditures (e.g., utilities, insurance, materials/supplies, etc.). Instructional staffing includes classroom teachers, a principal, assistant principal(s), guidance counselor(s), and librarian(s) aligned with school enrollment. The weighted composite index for each program and the program length weights (.5, 5/6th, or 1.0) were maintained in the formula to allow for the variation in program models.

In 2016, this AYGS SOQ-based funding formula was proposed by the Governor for the 2016-2018 biennium budget. (See Appendix F for copy of this report) This proposed SOQ-based funding formula provided an increase to the AYGS programs over the current funding formula. The General Assembly's action on this funding formula supported the current funding formula instead of the proposed formula.

After examination of both the *2014 AYGS Funding Formula Study* and the *2016 Review of the Funding Study* (see Appendices E & F) by the VDOE, the formula selected by the VDOE and proposed by the Governor for the 2016-2018 biennium seems to best meet the needs of the AYGS programs. While the funding formula does not fully fund the programs, it does support the programs at a level closer to the 40% funding support of high schools in school divisions. In addition, this funding methodology allows for changes to AYGS funding as the SOQ changes, and it allows for the incorporation of funds that may be tied to specific General Assembly provisions, such as teacher raises. Even though a new funding formula would increase revenue to the program from the state, the LEA contributions to the revenue should be held at the current level so that overall revenue does not remain the same but increases due to an increase in state funding. In addition, the Appropriation Act caps the number of students considered in the funding calculations. This funding cap on student enrollment (1800 students) should be removed. If the programs are to increase their enrollment, they should be funded for the students they serve.

Funding for each AYGS varies significantly based on a number of factors. To set the stage for this explanation, Table 6 lists all 19 of the current AYGS, along with their current funding and an estimate of the proposed increase based on the 2016 proposed SOQ-funding formula, which averaged an approximate 17% in 2016. This list reveals the wide variation across schools relative to their level of financial support, number of students served, curricular emphasis and so forth.

The information in Table 6 is modeled after the funding formula proposed in the 2016-2018 biennium using the average 17% increase to current state funding for each program. For a more detailed representation of the funding formula components, please see Appendices E and F.

Table 6*Comparison of Current and Proposed State Share AYGS Funding*

AYGS Program	FY2023 State Share Funding (Current Formula)	Estimated State Share Funding with Proposed SOQ-based Formula
A. Linwood Holton GS	\$1,215,673	\$1,422,337
Appomattox Regional GS	\$1,507,139	\$1,763,353
Blue Ridge GS	\$974,990	\$1,140,738
Central Virginia GS	\$530,781	\$621,014
Chesapeake Bay GS	\$620,639	\$726,148
Commonwealth GS	\$1,228,636	\$1,437,504
Governor's School for The Arts	\$1,572,331	\$1,839,627
Governor's School at Innovation Park	\$549,227	\$642,596
Governor's School of Southside Virginia	\$610,512	\$714,299
Jackson River GS	\$45,805	\$53,592
Maggie L. Walker GS for Government & International Studies	\$2,758,190	\$3,227,082
Massanutten Regional GS	\$267,409	\$312,869
Mountain Vista Governor's School	\$573,375	\$670,849
New Horizons GS For Science & Technology	\$597,231	\$698,760
Piedmont GS for Mathematics Science & Technology	\$590,732	\$691,156
Roanoke Valley GS	\$501,949	\$587,280
Shenandoah Valley GS	\$782,195	\$915,168
Southwest Virginia GS	\$364,511	\$426,478
Thomas Jefferson High School	\$4,369,034	\$5,111,770
Totals	\$19,660,359	\$23,002,620

Note: **Estimated average increase of 17%; Total difference \$3,342,261**

Increasing the Number of Students Attending Current AYGS

One option for increasing access to AYGS is to consider increasing the number of students attending existing programs. Estimating the cost of increasing these numbers is similar to estimating the cost of a new AYGS. The two previous studies of the AYGS funding formula (VDOE, 2014, 2016) contain important information about how the current funding model can be improved to adequately sustain existing AYGS. Before the implementation of new AYGS or adding students to existing programs, the adoption of an adequate funding model is recommended. The lesson to be learned first is that the costs to create and implement any new AYGS will vary from other AYGS based on several factors, as described previously. In short, there is no one answer to the question of how much a new program or expansion of existing programs will cost.

Determining reasonable timeframes and costs for adding students to current AYGS could be estimated quite accurately by the directors of the current schools at their specific location. Answering the question independent of location would likely be inaccurate and potentially problematic given the variations across the schools.

A judicious practice for increasing the numbers of students attending the AYGS would be to put out a call for the 19 directors to decide whether they would like to receive a planning grant for adding qualified students to their schools. The process would be even more efficacious if the call allowed the directors to decide to participate during the first year or second year of the grant process. That would enable those who are ready for a planning year to begin immediately, and those who would require a year to do some internal assessments of the extent of the needs for their region, as well as issues of diversity and travel to be considered. The possible use of modern technology such as virtual education technologies could be considered as a means to attend to site-specific needs to enhance current instructional practices, allowing a larger and potentially increasingly diverse student body, and to further assist those whose distance to the AYGS is formidable. It can also provide opportunities for students who need to miss classes due to illness, weather events, or as an additional means to connect large groups of AYGS students to activities of an educational or social nature across schools.

The idea behind the planning grant model is to build on successes and expertise where longstanding relationships have been forged. Some programs may not have space to add more students under the current site-specific circumstances, but with time and appropriate financial support additional arrangements can be made. For example, some current AYGS might be able to obtain additional space, or they could extend to other rental space or negotiate with a community college for space, if feasible. Under the current funding practices, some current agreements support community colleges receiving FTE count for the AYGS students, thereby receiving additional money from the state. This can make partnering with AYGS attractive for community colleges. In other cases, it is conceivable that the opportunity might require the cost

of adding on to the building. Estimates for these types of arrangements/costs are very difficult to estimate out of context of a specific AYGS.

To fully realize the possibility of providing access to all of Virginia's students who would benefit from attending an AYGS, additional costs would be incurred. For example, an enhanced advertising plan will need to be created, an increased number of recruiting sessions, and visiting communities from which students do not tend to apply. There are many examples of recruiting strategies that require a personal touch needed to recruit in areas and from groups who are considered underrepresented. These approaches tend to be labor intensive to originate. To make the changes needed to recruit the students who qualify, but who have historically not attended the AYGS, will require changes in the funding model currently used and the amount of money made available for recruiting and adapting the available space appropriate for the enhanced version of AYGS.

Residential Academies

One option for a new AYGS is a residential Governor's School (residential academies). Information about residential academies appears in Chapter 7 on environments of AYGS. There are presently 17 of these state-funded residential academies for HA/GT high school students across the US. Of these schools, the majority are STEM-focused, but three are devoted to the arts, one to the humanities, and three STEM-focused schools include an arts or humanities curriculum. Should a new residential AYGS be proposed, there are important considerations. There are three models of state-funded residential academies based on how they tend to be situated within differing settings such as campuses of colleges and universities or as independent entities. The Illinois Math Science Academy will be described as an exemplar of one model of residential academy (STEM-based, with an independent campus).

There are three models of residential academy: 1) STEM-based curriculum, 2) STEM and humanities and/or arts-based curriculum: 3) art-based curriculum. An academy with a STEM-based curriculum can exist on the campus of a university or on its own campus. In this model, the school has its own faculty. Exemplars of this model are the North Carolina School of Science and Mathematics (the first of its kind in the nation, circa 1980) and the Illinois Mathematics and Science Academy (IMSA). IMSA was founded in 1985 and will be explored more fully below. The second model has a STEM and humanities-based curriculum and can exist on the campus of a college or university or on its own campus. The Indiana Academy for Science Mathematics and Humanities represents the version of this school that has its own faculty and exists on a university campus. The Gatton Academy at Western Kentucky University also represents this model, but it is an early entrance to college program which uses the university faculty to teach its students. In the third example of the residential academies, those with an arts-based curriculum, exist on both college and university campuses or as independent schools and most often have their own faculty. Many of these schools offer college credit and Advanced Placement courses as well. The first of these schools was the University of North Carolina School of the Arts, which

began in 1965. Both the arts and STEM-based residential academies were begun by the former governor of North Carolina, Terry Sanford.

Additional information about the Illinois Mathematics and Science Academy (IMSA) is shared below, as it is a well-known and respected example of the first model of residential academies with a STEM-based curriculum. The school serves 650 students in grades 10-12 and has existed for almost 40 years. Leon Lederman, the famed physicist and Nobel Prize winner, is credited with founding IMSA. It has its own campus in Aurora, Illinois, which is near Chicago. IMSA has its own faculty, residential staff, and series of buildings.

The most recent budget of IMSA is shared (Figures 9 & 10) to illustrate its amount and relative complexity. It includes multiple funding sources, totaling approximately \$24,000,000. IMSA is a public state school so there are no charges to the students for tuition or room and board. There is a fee, however. The school employs over 100 full-time people. In addition to faculty and administrators are an entire residential life staff, including coaches and other supportive employees. The cost to build a comparable campus is not included.

Conclusion

Considering the constellation of factors that make up each of the 19 AYGS, it is ill advised to offer specific cost estimates to create a new AYGS. Consequently, we provided details of the salient factors such as geography, population served, curricular topic, transportation needs and program type (full-time, shared-time, virtual) to be considered. This information indicates the level of detail needed to estimate the cost for creating a new AYGS. The VDOE has had a process and procedures in place to create new AYGS for 25 years. The process recommends a 6-to-12-month timeframe for the creation of new AYGS.

Adopting the proposed SOQ-based funding model could provide the existing AYGS with much-needed funding to carry out their current operations. The description of SOQ-based funding for all 19 AYGS indicates approximately \$3,342,216 in increased revenue (see Table 6). This change in the funding model could be helpful in preparing the AYGS for a larger student body. The goal of adding students can be pursued judiciously given the expertise of the AYGS directors. However, it would be better if an updated funding model was completed before the efforts to grow the current AYGS in significant numbers are attempted. Given the evidence of the need to increase the number of Virginia's high ability students who attend an AYGS, it is recommended that the directors of the 19 AYGS be invited to determine the plausibility of increasing the number of students served at their particular school.

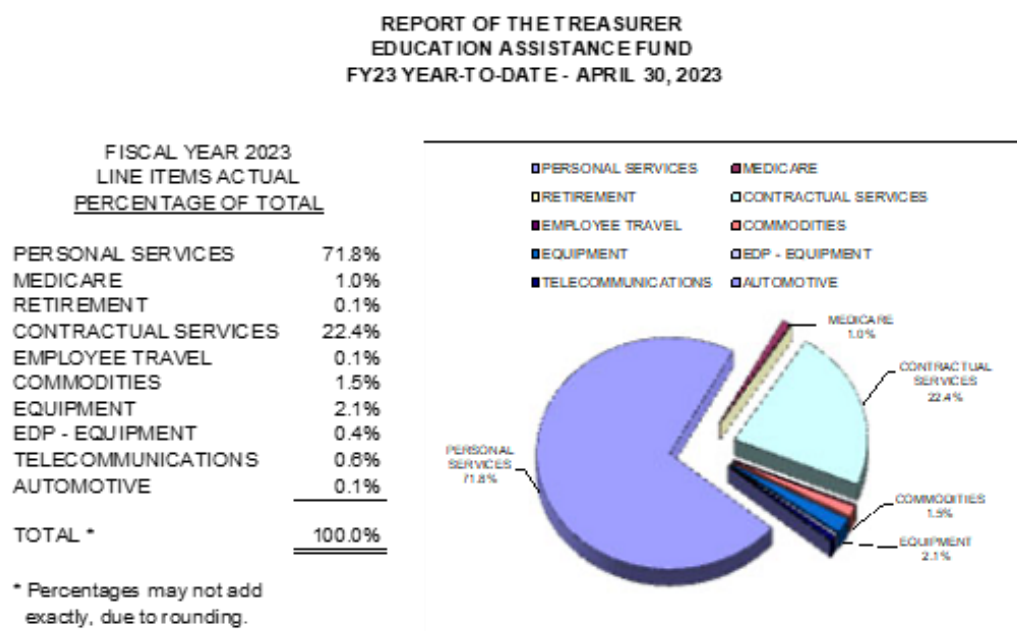
There are presently no state-funded residential academies in the Commonwealth. Should one be desired, the Illinois Math and Science Academy provides an example of the functional costs of running this model of a successful residential Governor's School.

Figure 9
Example Residential Academy Budget Showing Multiple Lines of Funding

and Science Academy ©
 Financial Results
 as of April 30, 2023

Total All Funds							Education Assistance Fund							Income Fund						
Budget/Spending	%*	Expense	Encumbered	YTD	Remaining Budget		Budget	%*	Expense	Encumbered	YTD	Remaining Budget		Budgeted	%*	Expense	Encumbered	YTD	Remain	
Appropriation				Exp. & Enc.	\$	%*	Appropriation				Exp. & Enc.	\$	%*	Spending				Exp. & Enc.	\$	
\$ 15,485,235	64.5%	\$ 11,894,795	\$ 3,590,440	\$ 15,485,235	\$ -	0.0%	\$ 13,838,000	69.6%	\$ 10,593,155	\$ 3,244,845	\$ 13,838,000	\$ -	0.0%	\$ 1,520,211	79.4%	\$ 1,202,334	\$ 317,877	\$ 1,520,211	\$ -	
275,101	1.1%	209,538	65,563	275,101	-	0.0%	200,600	1.0%	148,723	51,877	200,600	-	0.0%	\$ 33,255	1.7%	24,707	8,548	33,255	\$ -	
91,526	0.4%	90,197	-	90,197	1,329	1.5%	11,900	0.1%	10,571	-	10,571	1,329	11.2%	\$ -	0.0%	-	-	-	\$ -	
6,405,860	26.7%	4,144,594	1,300,871	5,445,465	960,395	15.0%	4,714,400	23.7%	3,305,098	1,076,371	4,381,469	332,931	7.1%	\$ 274,715	14.4%	145,934	25,498	171,432	103,000	
149,325	0.6%	69,053	34,679	103,732	45,593	30.5%	33,600	0.2%	18,964	5,782	24,746	8,654	26.4%	\$ 22,519	1.2%	9,739	1,244	10,993	11,000	
525,751	2.2%	283,735	97,311	381,046	144,705	27.5%	377,200	1.9%	215,147	61,812	276,959	100,241	26.6%	\$ 57,313	3.0%	11,611	15,384	26,995	30,000	
777,057	3.2%	346,087	107,521	453,608	323,449	41.6%	502,500	2.5%	311,940	78,852	390,792	111,708	22.2%	\$ 732	0.0%	732	-	732	-	
85,100	0.4%	53,620	31,280	85,100	-	0.0%	85,100	0.4%	53,620	31,280	85,100	-	0.0%	\$ -	0.0%	-	-	-	-	
150,139	0.6%	105,548	31,318	136,866	13,273	8.8%	104,800	0.5%	81,832	17,853	99,685	5,115	4.9%	\$ -	0.0%	-	-	-	-	
43,800	0.2%	34,703	7,474	42,177	1,623	3.7%	23,300	0.1%	20,680	2,097	22,777	523	2.2%	\$ 5,000	0.3%	5,000	-	5,000	-	
10,470	0.0%	1,163	742	1,905	8,565	81.8%	-	0.0%	-	-	-	-	N/A	\$ -	0.0%	-	-	-	-	
-	0.0%	-	-	-	-	0.0%	-	0.0%	-	-	-	-	N/A	\$ -	0.0%	-	-	-	-	
-	0.0%	-	-	-	-	0.0%	-	0.0%	-	-	-	-	N/A	\$ -	0.0%	-	-	-	-	
\$ 23,999,364	100.0%	\$ 17,233,233	\$ 5,267,199	\$ 22,500,432	\$ 1,498,932	6.2%	\$ 19,891,400	100.0%	\$ 14,759,930	\$ 4,570,769	\$ 19,330,699	\$ 560,701	2.8%	\$ 1,913,745	100.0%	\$ 1,400,057	\$ 368,551	\$ 1,768,608	\$ 145,000	
	100.0%		100.0%					82.9%		85.6%					8.0%		8.1%			
Characteristics:							Characteristics:							Characteristics:						
Appropriated by State?							Yes							State-approved spending authority						
Funding Source							Appropriated State revenues							IMSAs earned revenues (various fees, commissions, and rentals)						
Cash Holder							State							State						
Unspent Funds Returned to State at Year-end?							Yes							No						
Line Item Budget Required?							Yes							Yes						
Line Item Expense Reporting Required?							Yes							Yes						
Constraints on Use of Fund							Up to 2% may be reallocated between line items, but Personal Services expenses may not be reduced.							Program revenues are not restricted but have been used for those programs. Up to 2% may be reallocated between line items, but Personal Services expenses may not be reduced.						
Strategic Funding Focus:							1) Core residential and outreach programs 2) Administration and infrastructure 3) Facilities (along with Capital funding)							1) Residential student programs 2) Revenue-generating outreach programs 3) Cash reserves						

Figure 10
Example Residential Academy Budget Breakdown



IMSA's FY23 Education Assistance Fund appropriation is part of the State's aggregate General Fund, and it is appropriated by the General Assembly in line item amounts. EAF funds are provided from the general taxing activities of the State and are held in the State Treasury. Appropriations not expended during the current fiscal year, including the "lapse period", are returned to the State's General Fund.

(a) Public Act 102-0698 appropriated \$19,891,400 to IMSA to meet ordinary and contingent expenses incurred on or before June 30, 2023.

Recommendations

1. We encourage the development of a more efficacious funding model that will provide the greatest impact for the AYGS programs. The 2018 VDOE report provides a good model for changes to the current budget model.
2. A conclusion drawn from an analysis of these Governor's Schools is that there are some similarities and many differences across the schools that make providing a one-size-fits-all recommendation about the cost of creating a new Governor's school ill advised. Consequently, considering the specific costs of creating and running a new AYGC can be deduced from the actual current costs included for the various manifestations of the differing models of AYGS provided.
3. The VDOE recommends a timeframe of 6 to 12 months to complete the extensive planning and discussions among the participating school divisions to produce a program with the necessary characteristics. This timeline applies to all new AYGS. The document created by the VDOE in 1998 to create new AYGC is included in Appendix D.
4. Adding students to current AYGS could be estimated quite accurately by the directors of the current schools and at their specific location. Adding new students to the current AYGS would benefit by having the budget model updated. See Appendix E for a copy of the VDOE report describing potential enhancements to the AYGS budget model.
5. A judicious practice for increasing the numbers of students attending the AYGS would be to put out a call for the 19 directors to decide whether they would like to receive a planning grant for adding qualified students to their schools. The directors are well placed and expert at discerning actual costs of serving AYGS students in their specific location.
6. To fully realize the possibility of providing access to all of Virginia's students who would benefit from attending an AYGS, additional costs would be incurred. To make the changes needed to recruit the students who qualify, but who have historically not attended the AYGS, will require changes in the funding model currently used and the amount of money made available for recruiting and adapting the available space appropriate for the enhanced version of AYGS.

Chapter 6

Curricular Focus at AYGS

High ability and gifted and talented (HA/GT) students possess exceptional abilities that set them apart from their peers. In fact, these students even vary from each other with respect to their abilities and interest areas. Tomlinson et al. (2002) state that “there is no such thing as “the” gifted learner” (p. 19). HA/GT students can have diverse talents and abilities, with variations in motivation, achievement, and the impact of education. Each HA/GT student either manifests different types of talents and abilities, or they may have them as latent. Furthermore, while some are multipotential, others may have a single area of strength (Tomlinson et al., 2002). Irrespective of the differences among them, all these students require educational experiences that not only nurture their talents but also provide opportunities for intellectual growth and development. To address such individual differences among these students, the curriculum, and instructional strategies for them should be kept flexible, such that it can address the broad range of needs. VanTassel-Baska (1986) proposed the incorporation of the three dimensions of advanced content, high-level process and product work, and intra- and inter-disciplinary concept development and understanding, to address the needs of the HA/GT students. This has been proven effective in school settings in various core subjects (VanTassel-Baska & Brown, 2007).

Curricular focus plays a pivotal role in addressing the unique needs of these students, fostering their potential, and preparing them for future success. The attributes of challenge and meaningfulness are critical elements in a curriculum to promote motivation for HA/GT students (Little, 2012). The curricular focus for HA/GT students is a multifaceted endeavor that extends beyond the formal-explicit curriculum (Bloom, 1981). While the explicit curriculum provides the foundation for advanced learning, the hidden curriculum (Bloom, 1981; Portelli, 1993) plays a vital role in nurturing critical thinking, creative thinking, problem-solving, and social-emotional skills. Integrating the explicit and hidden curricula can create a comprehensive educational experience that can maximize the potential of HA/GT students. By recognizing and addressing the unique needs of these students, educators can empower them to become lifelong learners, critical thinkers, and contributors to society.

The explicit curriculum for HA/GT students should be designed to challenge their advanced abilities and knowledge. It should provide depth, complexity, and acceleration, allowing these students to delve into subjects at a more profound level (Stambaugh, 2021). Enrichment activities, advanced coursework, and interdisciplinary approaches can all be incorporated to ensure that the explicit curriculum is tailored to their needs. By providing a rigorous academic foundation, the explicit curriculum fosters intellectual growth and encourages the pursuit of knowledge in their areas of strength (VanTassel-Baska & Brown, 2021).

While the explicit curriculum is crucial, the hidden curriculum is equally significant in supporting the holistic development of HA/GT students. The hidden curriculum encompasses the

values, attitudes, and skills that are implicitly taught through classroom interactions, extracurricular activities, and social experiences (Phillips, 1976). HA/GT students should be encouraged to analyze, evaluate, and synthesize information, enabling them to think deeply and critically about various subjects (Bloom, 1985). Through exposure to complex problems, interdisciplinary projects, and inquiry-based learning, HA/GT students develop the capacity to question assumptions, consider multiple perspectives, and make informed judgments (Dixon et al., 2004). Furthermore, nurturing their creative abilities allows these students to approach problems with innovative solutions and think outside the box (Milgram & Hong, 1993). Opportunities for divergent thinking, brainstorming, and creative problem-solving should also be embedded within the curriculum (Fletcher, 2011; Isaksen & Parnes, 1985). Engaging in artistic endeavors, research projects, and real-world problem-solving tasks through such opportunities can help in cultivating their creativity, which is essential for HA/GT students to develop innovative thinking and find unique solutions to complex challenges. By fostering creativity, HA/GT students can explore alternative perspectives and unconventional approaches, unleashing their full potential in various domains of knowledge and expertise (Handa, 2015). Handa's (2015) framework of creative pedagogy can be applied in schools to bring a systemic change – an example of a practice in a school setting to develop creative thinking skills among the students.

Additionally, the hidden curriculum can also focus on developing social-emotional skills of the students (e.g., Cross & Cross, 2017; VanTassel-Baska et al., 2009). HA/GT students often experience unique social and emotional challenges, such as perfectionism, asynchronous development, and heightened sensitivity. By integrating social-emotional learning into the curriculum, educators can provide support for these students' well-being. For example, teaching self-awareness, self-regulation, empathy, and effective communication skills equips HA/GT students with the tools they need to navigate relationships, cope with stress, and develop healthy emotional intelligence.

Thus, to fully meet the needs of HA/GT students, the explicit and hidden curricula should be integrated seamlessly. The explicit curriculum should be designed to incorporate opportunities for critical and creative thinking, problem-solving, and social-emotional development. For instance, project-based learning can serve as a platform for students to engage in in-depth research, apply their knowledge creatively, and collaborate with peers, fostering both academic and social-emotional growth (e.g., Makkonen et al., 2021). Furthermore, incorporating interdisciplinary approaches (Jacobs & Borland, 1986) can enable students to make connections between different subjects, encouraging critical thinking and the application of knowledge in diverse contexts.

The significance of incorporating interdisciplinary approaches in education cannot be overstated. Sisk's (2022) study demonstrates the profound impact of such approaches on students' ability to forge connections between diverse subjects, thereby fostering a deeper

comprehension of the material and nurturing critical thinking skills. By delving into themes and guiding questions that transcend disciplinary boundaries, HA/GT students are empowered to explore topics from various perspectives, engaging in comprehensive and multidimensional study. This methodology not only expands their knowledge but also facilitates the transfer of critical thinking, synthesizing, and research skills across different subject areas. Moreover, interdisciplinary instruction enables students to develop an awareness of the ethical dimensions (Sisk & Torrance, 2001) inherent in complex issues, nurturing empathy and a nuanced understanding of moral considerations. Through the application of interdisciplinary approaches, students can seamlessly apply their knowledge and insights from one subject to another, fostering a holistic and interconnected understanding of the world. Ultimately, these immersive experiences cultivate creativity, foster independent thinking, and equip students with the essential skills required for success in our increasingly intricate and interconnected society.

The curriculum at Academic Year Governor's Schools (AYGS) is designed to provide HA/GT students with a challenging and enriching educational experience. The specific curriculum varies among the different AYGS based on regional needs, but generally, it offers a broad range of advanced courses in various subject areas to cater to diverse interests and talents of the students. Throughout the Commonwealth of Virginia, the AYGS focus on providing rigorous coursework in core subjects such as mathematics, science, English, and social studies. These courses are typically accelerated and more in-depth than those offered in traditional high schools, allowing students to delve deeper into the subject matter and explore advanced concepts. Additionally, AYGS may offer specialized courses or programs in areas like technology, engineering, the arts, marine, environmental science, international studies, or foreign languages, etc. depending on the region it serves and the availability of resources.

Some AYGS also frequently emphasize interdisciplinary learning and encourage students to make connections across different subject areas. Students sometimes have opportunities for independent research projects, collaborations with professionals, or internships to further enhance their learning experiences through the AYGS. In addition to academic coursework, most AYGS also offer a range of extracurricular activities and enrichment programs to complement the curriculum. Some examples of such activities are different types of competitions, academic events, guest speakers, field trips, leadership development programs and community service opportunities, which help in fostering a well-rounded education.

Curricular Focus of the Governor Schools: What the Participants Perceive

Perceptions and preferences of various stakeholders regarding the curricular focus at various models of Academic Year Governor's Schools (AYGS) were studied with the help with the help of information about the governor schools, survey, and interviews with different stakeholders. We also tried to understand the potential demand for additional areas of focus. The overall findings have been described under the following sections: regional suitability, need for

flexibility and diverse course options with balance, emphasis on interdisciplinary learning and soft skills, college readiness and advanced learning, recommended directions.

Regional Suitability

When the participants were asked about suitability of the curriculum to their region, significant differences were found among the different stakeholders, both when they responded to the survey with respect to all AYGS in general²¹ (Figure 11) or for a specific²² AYGS (Figure 12). Specifically, it was found that students, parents, school employees, and community/board members are generally in agreement about the suitability of the present curricular focus. However, when responding about AYGS in general, those with other/multiple roles tend to disagree about the suitability compared to other groups.

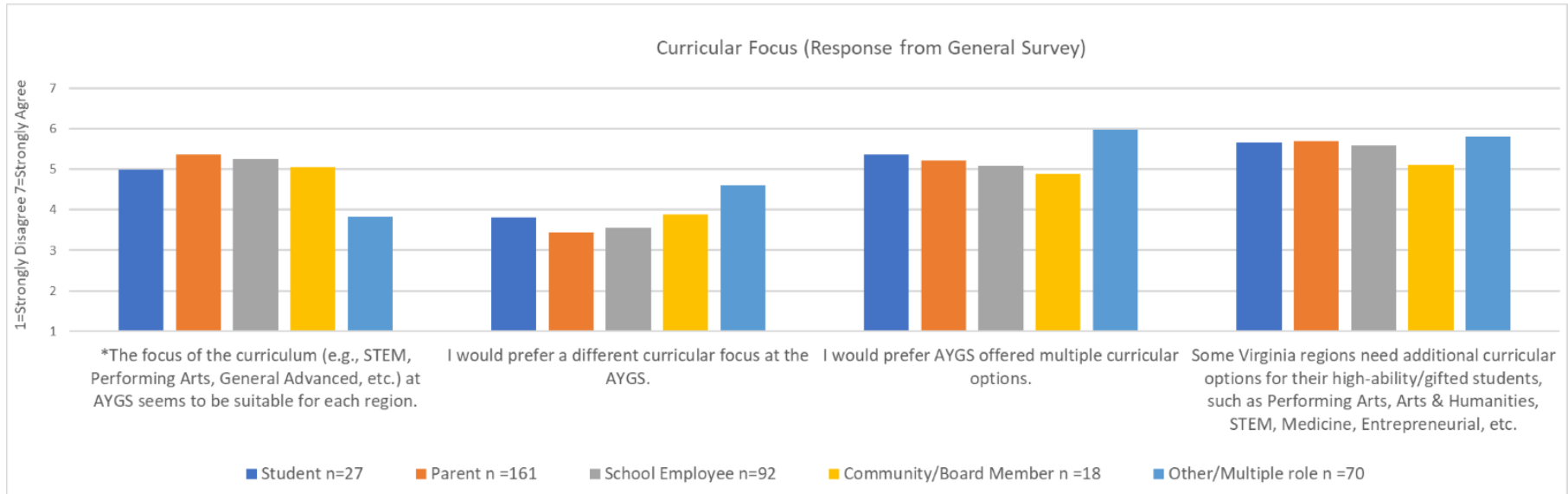
AYGS often offers classes that are not typically available at base schools due to several challenges. The participants from some AYGS frequently highlighted the opportunities for research, exposure to labs, and strong academic background that allowed them to diversify their skills. They also believed that the curricular focus of some AYGS, even with limited resources, aligns with their region's needs and desire. Some AYGS also focus strongly on their specific content by making use of the regional attributes striving to prepare students holistically.

While some of the participants applauded the AYGS' curriculum catering to the local community need, some of the participants also complained of the confined curriculum and supported additional curriculum focus based on the needs of the community, indicating a mixed view across the Commonwealth of Virginia. This must have been due to the stakeholders' focus on their own region during their participation in the study, which indicates the diverse perspectives about the suitability of the curricular focus across the state. This was also found in the data where participants also sometimes complained about the irregular curriculum focus across the state and the availability of limited options, thus limiting the nurturance of diverse abilities among the student population. For example, while commending the focus of their region, one participant complained about the uneven distribution of educational opportunities with some areas having limited choices. They state "[One AYGS] offers students a school with an Environmental Science focus, but it fits well with our region. Students in Harrisonburg City have additional options, but students in Shenandoah and Page have very few additional options available to them" (SE230073). Similarly, commenting about the local need and desire for expanding the curriculum for their region's AYGS, one parent said, "A wildly agricultural community. Programs based around that would be beneficial" (PAR230926).

²¹ Kruskal-Wallis H test: ($\chi^2[5] = 12.68, p < .05$)

²² Kruskal-Wallis H test: ($\chi^2[5] = 12.74, p < .05$)

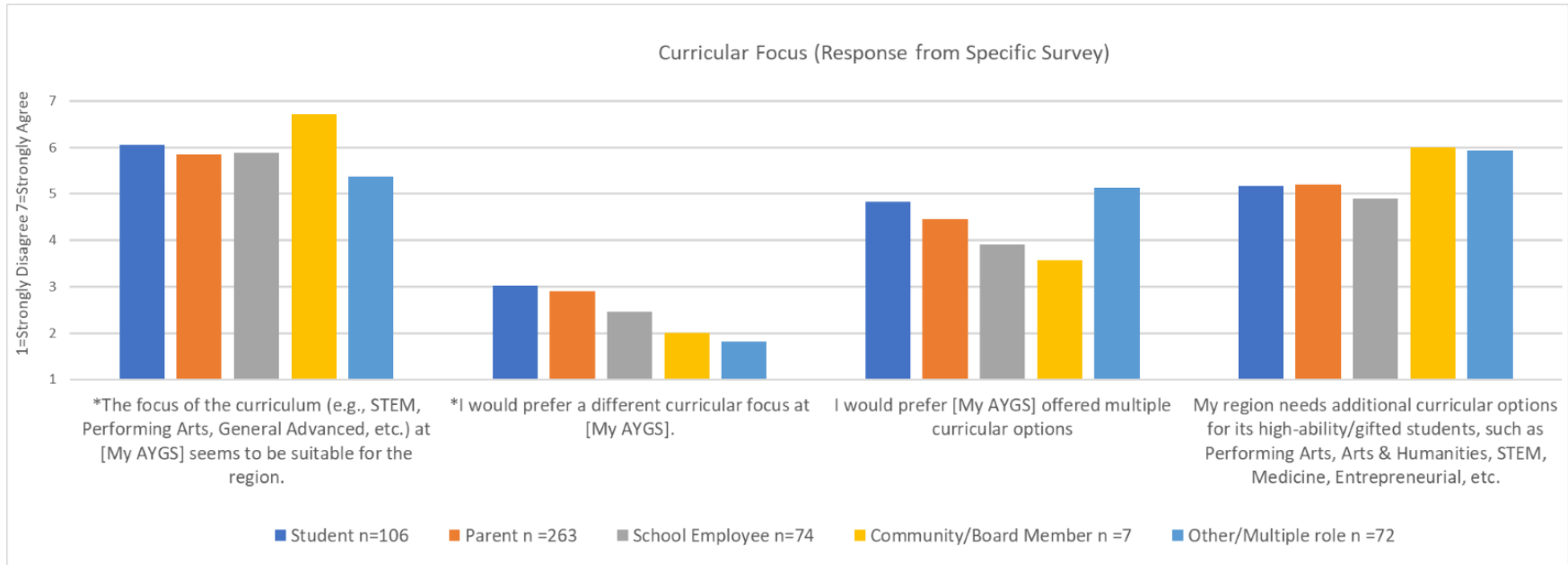
Figure 11
Perceptions of Curricular Focus (General Survey Responses)



Note: Scores above 4.0 indicate agreement.

* $p < .05$

Figure 12
Perceptions of Curricular Focus (Specific Survey Responses)



Note: Scores above 4.0 indicate agreement.

* p < .05

One participant suggested that “As other needs arise, other schools can be developed, but there is no need for all regions to have the same program” (OTH230208). While it is crucial to provide specialized opportunities for HA/GT students, it may not be necessary or practical for every region to have the exact same program. Different regions have unique needs, resources, and priorities, which should be considered when designing educational programs. By tailoring programs to the specific needs of each region, it becomes possible to address the diverse talents and interests of HA/GT students effectively. This approach allows for greater flexibility and responsiveness to local needs, ensuring that educational opportunities are aligned with the characteristics and aspirations of the community.

Moreover, school districts with access to more than one AYGS were found to be at an advantage, since the students had the option to choose based on the curricular focus of the AYGS. Providing access to multiple schools meets the needs of the region effectively, while stakeholders having access to only one AYGS found it constricting. For example, a parent stated, “Having only one Governor's School in the region seems to be limiting for students. High achieving students may not be interested in the environment but attend [the AYGS] because it’s the only option. Similarly, students who are fascinated with the environment may be disappointed that their peers aren't as invested” (PAR230777).

Need for Flexibility and Diverse Course Options with Balance

The varying perspectives on regional suitability also highlight the need for greater flexibility and diverse course options with a balanced approach to meet the diverse abilities and needs of students across the Commonwealth of Virginia. The availability of diverse and flexible course options is crucial to meet the specific needs and interests of HA/GT students, allowing them to explore their passions, engage in advanced studies, and foster their talents in a supportive learning environment. When asked about preference for AYGS to offer multiple curricular options, there was widespread agreement on this matter both when participants responded to the survey in general (Figure 11) and for a specific AYGS (Figure 12). There was also a unified strong agreement that there is a need for additional curricular options for HA/GT students both when the participants were talking about their own region or some general regions in Virginia. A need for diversification of curricular focus was also seen through some of the qualitative data. While participants frequently commended the suitability of the curriculum and targeted study areas of their AYGS participants, they also frequently highlighted the importance of catering to diverse interests and ensuring a balance between specialized focus and broader educational opportunities. Participants also complained about the lack of options for their region. For example, while talking about the curricular focus, one school employee stated, “it would be nice to have additional options for our kids” (SE230227) apart from the current focus area of the school or by adding a new AYGS with a different focus.

This also indicated that, while there was satisfaction with the current curricular focus among the stakeholders, the need for additional options and flexibility was strongly desired. This was evident when the stakeholders were asked whether they would prefer a different curricular focus at AYGS. Stakeholders responding to the specific survey had a lower preference for a different curricular focus at their AYGS (Figure 12). But there were significant differences among the responses of the stakeholders only when they were responding about a specific AYGS²³. Students were seen to moderately disagree, both when they were responding to all AYGS in general (Figure 11) or a specific one (Figure 12). Comparatively, stakeholders with other/multiple roles more strongly disagreed that a different curricular focus was needed when responding about a specific AYGS, than when responding about the AYGS in general. However, a perception of the need for additional focus was signaled where a participant acknowledging “AYGS is exceptional throughout Virginia...”, also stated that “we simply need to expand the focus on the one that exists, so we can serve all exceptional/gifted students in this area” and “Curricular focus cannot be defined by region. That focus has nothing to do with the needs of the students, but rather it represents what is valued most by the regional taxpayers.” (SE230534). Many other participants had similar views and supported the need for diverse curricular focus in the regions.

Elaborating the perception of the stakeholders further, most participants strongly suggested that by promoting non-STEM career options more explicitly, students can become more aware of the possibilities available to them beyond the STEM field. They also often noted how they would have preferred more flexibility to explore different paths and career courses such as business. For example, a school employee noted,

The AYGS meets a powerful need for students with intellectual gifts, and we strive to bring fine/performing arts, STEM, entrepreneurial, and a wealth of other opportunities into our curriculum to maximize the student experience. Additional curricular opportunities (theater, medicine, etc.) would always be a wonderful opportunity to see unfold, though, in addition to AYGS! ... any programming that can best nurture and develop the talents of any given learner is a worthy investment (SE230879).

Emphasis on Interdisciplinary Learning and Soft Skills

The above discussion on flexibility and diverse course options in AYGS can also be expanded by an emphasis on interdisciplinary learning and soft skills, thus valuing a well-rounded education that goes beyond a singular focus. It is important to provide opportunities for the HA/GT students to explore and integrate knowledge from various disciplines. With the help of diverse course options, students can also engage in interdisciplinary projects and gain a broader understanding of real-world challenges that require multidimensional solutions. In addition, interdisciplinary learning can also serve as a platform to develop their soft skills by

²³ Kruskal-Wallis H test: ($\chi^2[5] = 12.14, p < .05$)

encouraging students to think critically, communicate effectively, collaborate with peers from different disciplines, and adapt to different perspectives and approaches. This can not only enhance the overall educational experience but also prepare the students for future success in this rapidly evolving world. These skills are essential in fostering creativity, innovation, and the ability to tackle complex problems that transcend traditional disciplinary boundaries.

Most AYGS have been regularly making efforts to emphasize interdisciplinary learning and soft skills, by adopting an interdisciplinary and project-based approach (e.g., offering STEM courses along with humanities or fine arts, etc.). Often, however, such interdisciplinary approaches are focused on only the areas of focus at the specific AYGS, and the stakeholders would prefer an expansion of that focus. For example, in some AYGS with limited focus on interdisciplinary learning, participants said that “it would be good to have more cross-disciplinary connections in classes” (PAR230306), another stated, “...the opportunity for transdisciplinary/ integrated teaching and learning should be explored and encouraged...” (MUL230055). Another stakeholder with multiple roles stated,

While I like the idea of having magnet-type options with other focuses (particularly social sciences or arts) in the area, my position as both a parent and educator is that the most valuable learning, besides socialization to collaborate toward success, that [my AYGS] provides is that understanding of scientific reasoning and research processes, so I would prioritize including that as a central element of any curriculum (MUL230719).

College Readiness and Advanced Learning

College readiness and advanced learning in the AYGS can be promoted with the help of advanced courses beyond the traditional classroom, that align with college-level content and rigor. This can also help the students at AYGS develop critical thinking skills, independent research abilities, and a deep understanding of complex concepts. Offering advanced placement (AP) courses or opportunities to earn college credits (dual enrollment) can further prepare students for the academic demands they will encounter in higher education. AYGS can also foster partnerships with local colleges and universities, allowing students to access research opportunities, internships, or mentorship programs. Collaborating with industry professionals and experts in various fields can expose HA/GT students to real-world experiences, cutting-edge research, and practical applications of their knowledge.

Some AYGS have a strong focus on college readiness, which is highly valued by its students. They aim to prepare students for first-tier universities and colleges through their current curriculum, which can be modified based on partnerships with companies and colleges to support students’ academic needs. A participant with multiple roles stated, “...technology and law have brought about opportunities for academically advanced classes in many ways, such as online access to college or AP coursework and VA Code that requires each division have a pathway to an associate’s degree or certificate of general education within their division” (MUL231137).

However, participants from other AYGS identified a lack of varied advanced learning opportunities. Some students also mention the missed opportunity to earn their associate's degree through dual enrollment. For example, a parent stated, "I wish it was easier (in terms of fitting the classes in) for students to earn their associates alongside their high school diploma. And having additional governor's schools with other focus areas (fine and performing arts) would help those students who are exceptional develop their talents further" (PAR230025). Similarly, other parents said, "Would like a dual enrollment option built into [my AYGS] curriculum" (PAR 230088), "the art students do not have the ability to take AP Art or IB Art as well as other AP, IB, or Dual enrollment courses. The school has much fewer offering[s] than other Governor Schools..." (PAR230098).

Recommended Directions from the Participants

The diverse needs and regional variations in curricular focus among AYGS highlight the importance of recognizing that a one-size-fits-all solution may not be suitable for all regions. The participants in the study provided suggestions for expanding the curricular focus based on the specific needs and interests of their communities. These suggestions highlight the importance of addressing the regional context and catering to the unique demands of the student population in different areas. For example, there was an emphasis on the need for classes related to policy and government, recognizing the commuting population in Northern Virginia. By incorporating classes that delve into topics such as policymaking, government structures, and civic engagement, AYGS can equip students with a deeper understanding of the political landscape and empower them to become active and informed citizens. The need for additional focus on arts and STEM was seen more widely among the participants than any other focus areas. Some overall suggestions from the participants included- STEM; medicine; fine and performing arts, design, writing; humanities; "art (photography, art history, animation, etc.)" (PAR230517); government/political science; Entrepreneurial; International studies; Life skill courses (e.g., human economics, etc.); English or Social Studies.

Conclusion

Though the participants generally appreciated the focus areas of their respective AYGS programs, there was clearly an expressed desire for additional focus areas or broader curricula to cater to a wider range of student interests. The participants mostly valued the opportunities for advanced learning, and the strong academic foundations provided. However, they also highlighted the importance of diversification of the curricular focus, promoting non-STEM fields, enhancing technical and hands-on learning, and increasing awareness of available choices. These insights emphasize the need for flexibility and diverse offerings to meet the needs and interests of students and communities.

As discussed previously, the education of HA/GT students requires a comprehensive approach that addresses their individual needs and fosters their intellectual, creative, and social-

emotional development. The integration of explicit and hidden curricula is crucial in providing a well-rounded education that challenges and nurtures these students. By designing an explicit curriculum that offers advanced and interdisciplinary content, enrichment activities, and opportunities for depth and complexity, HA/GT students can delve into subjects at a profound level and pursue their areas of strength. Meanwhile, the hidden curriculum, which includes values, attitudes, and social-emotional skills, plays a vital role in nurturing critical and creative thinking, problem-solving abilities, and social-emotional well-being. By seamlessly integrating both curricula, educators can empower HA/GT students to become lifelong learners, critical thinkers, and contributors to society. Moreover, the importance of interdisciplinary approaches in education cannot be overlooked, as they promote comprehensive understanding, critical thinking skills, and ethical considerations. By embracing interdisciplinary instruction, HA/GT students can develop a holistic understanding of the world and apply their knowledge across diverse contexts. Ultimately, by recognizing and addressing the unique needs of HA/GT students, educational institutions can unlock their full potential and prepare them for success in an increasingly complex and interconnected world.

Recommendations

1. Many stakeholders expressed a desire for a broader range of elective courses that cater to a variety of interests and academic disciplines. By expanding the selection of elective subjects, students will have the opportunity to explore different fields and tailor their education to align with their individual passions and career aspirations. Where possible, a greater variety of elective courses should be considered.
2. While some AYGs offer interdisciplinary activities, it may be helpful for those with a more specific focus to encourage the integration of various subjects, such as science, technology, engineering, arts, mathematics (STEAM), business, etc., to foster creativity, critical thinking, and problem-solving skills. Interdisciplinary projects and collaborations can provide students with a well-rounded education and better prepare them for real-world challenges. Furthermore, it is important to recognize the importance of digital skills in today's technology-driven world. Incorporating computer science, coding, and digital literacy courses into a curriculum that does not currently include these components can help to equip students with the necessary skills to thrive in the digital age.
3. Some stakeholders expressed a desire for more opportunities to earn college credit while studying at the AYGs. Directors may want to consider how their programs enable these opportunities.

Chapter 7

AYGS Environments

The objective of the AYGS is to “provide educational options not available in home schools for students identified as gifted or eligible to be so designated” (Virginia Department of Education, 1998, p. 3). Students in these programs can expect to experience the following opportunities:

- to develop their own separate identity as a community of learners,
- to learn and grow in an environment that nurtures the unique abilities and needs of gifted learners,
- to develop a positive and realistic concept of self and others,
- to belong to a community of learners who share interests and abilities,
- to learn about subjects of interest to them,
- to be risk-takers and decision-makers in a non-threatening environment,
- to provide career exploration and/or advanced classes which may help students as they prepare for college or other post-secondary opportunities, and
- to expand their knowledge of and interest in science and technology, the humanities, and the arts by providing interaction with community, industry, professionals, and higher education (VDOE, 1998, p. 3).

Fulfilling these objectives requires a significant commitment of resources and time. James J. Gallagher, the U.S. Associate Commissioner for Education from 1967 to 1970 and the first Chief of the Bureau of Education for the Handicapped in the U.S. Office of Education who introduced the concept of the Individualized Education Plan (IEP), challenged educators to examine the amount of time being allocated to providing HA/GT students with an appropriate education (Gallagher, 2000). A one-hour per week pull-out program for HA/GT students was a “*nontherapeutic educational dose*” (p. 10), he wrote, inadequate to the task of giving them the “scope and intensity” (p. 9) required to meet their needs. To achieve the lofty goals set by the VDOE, the design of each AYGS must offer sufficient time in addition to the other resources required. Technological advances have made virtual programming a readily accessible option, but are they able to provide the “scope and intensity” (p. 9) required for HA/GT students? Can each of the AYGS formats – shared-time, full-time, and virtual – effectively develop students’ identities as members of a community of learners? In this chapter, research and stakeholder opinions on the varying models of the AYGS will be explored.

Research on Advanced Programming

The majority of research on special programs for HA/GT students has been done with elementary school students. At the elementary level, significant achievement gains have been associated with special programs for these students, over and above what is seen with other forms of ability grouping (Steenbergen-Hu et al., 2016). Just being grouped with other students of similar ability was not as effective in increasing academic achievement as participation in a specially designed program. Studies have found that HA/GT students in special programs with appropriate “scope and intensity” (Gallagher, 2000, p. 9), including special curriculum and instructional provisions, had higher achievement than HA/GT peers not in such programs (e.g., Delcourt et al., 2007; Kulik & Kulik, 1987, 1991; Watts et al., 2015).

In research examining the educational experiences of adults in STEM fields (e.g., receiving STEM PhDs, having STEM publications, obtaining STEM patents, majoring in STEM fields, etc.), the most accomplished adults had received what the researchers termed “a richer density of advanced precollegiate educational opportunities in STEM (a higher ‘STEM dose’) than less highly achieving members” (Wai et al., 2010). These may have been opportunities such as special classes, Advanced Placement (AP) classes, college courses taken during high school, research activities, or academic competitions. The experiences of students at specialized science high schools like the AYGS were associated with persistence in STEM fields as adults (Almarode et al., 2014; Subotnik et al., 2010). Taking just one AP course is associated with a higher likelihood of attending college (Chajewski et al., 2011). Increasing numbers of AP courses were associated with higher GPA’s and enrollment in higher level courses (Ackerman et al., 2013), but more than four showed no improved benefit (Beard et al., 2019).

Achievement is not the only concern when examining rigorous advanced programs for high school students. Students in AP or International Baccalaureate (IB) programs reported higher stress levels than those in general education, but those with higher levels of motivation and engagement in these programs had better psychological and achievement outcomes (Suldo et al., 2018). This finding contributes to the argument that advanced academic programs may want to consider student motivation in their admissions criteria. The heightened stress for students in rigorous academic programs was associated with “academic requirements, transitions and societal problems, academic struggles, and extra-curricular activities” (Suldo et al., 2009, p. 926). While research suggests AYGS students may be better able to handle these stressors than their peers in general education (Suldo & Shaunessy-Dedrick, 2013), not all students have effective coping strategies or supports to help them with their academic struggles (Suldo et al., 2018).

High ability and gifted and talented (HA/GT) high school and college students reported frequent boredom in general education classrooms, dampening their enthusiasm for a subject area they might otherwise have been passionate about (Fredericks et al., 2010). The positive

experience of being together with intellectual peers is a regular refrain among students in gifted programs of all types (e.g., Coleman et al., 2015; Hertzog, 2003; Rollins & Cross, 2014a).

Based on empirical evidence, the case for providing AYGS in any format is strong. Students are likely to find intellectual peers in an environment that is designed to challenge them at their ability level. Evidence points to success in college and career among students attending rigorous programs like the AYGS, which appear to be providing students with the “therapeutic dose” of advanced academics Gallagher (2000) believed they need. The goal of building a community of learners ensures AYGS students’ emotional needs are a priority.

Research on Virtual Options in Gifted Education

Virtual programming has been explored as an option for HA/GT students’ instruction for at least two decades (Adams & Cross, 2000; Periathiruvadi & Rinn, 2012; Potts, 2019). Online classes have afforded HA/GT students access to classes they might not otherwise be able to take because of limitations in what their school can offer or due to scheduling conflicts (Thomson, 2010). Technology allows educational options that overcome barriers to the provision of HA/GT services, such as geography, a lack of qualified teachers, or the economic limitations of a school district (Periathiruvadi & Rinn, 2012). There are numerous options for providing virtual courses, from part- to full-time schedules; taking place in the student’s school building or elsewhere, including at home; and live instruction with teacher and students in the lesson at the same time (synchronous), with neither teacher or students in the lesson at the same time (asynchronous), or some combination of these settings (hybrid).

Success in virtual courses requires significant self-regulation on the part of the learner, who must be able to work independently (Potts & Potts, 2017), particularly when they are in charge of their own schedules, as in asynchronous or hybrid virtual courses. HA/GT students enjoyed being able to work at their own pace in rigorous online courses (Swan et al., 2015; Thomson, 2010; Wallace, 2009). Little research has been conducted on the effectiveness of virtual courses with HA/GT students, however. Articles were much more likely to describe a virtual program than to have gathered evidence of its effectiveness (Periathiruvadi & Rinn, 2012). One study of virtual courses in general (not specific to HA/GT students) in a sample of 732 schools found those that had adopted online learning did not have significantly different achievement than those that did not adopt online learning (Kimmons, 2015). This finding calls into question the benefit of adding online learning options where they are not needed to overcome barriers to access.

A few studies explored indicators of success, such as students’ perceptions of virtual courses. In a study of 200 high school students taking advanced online courses, the students enjoyed their courses, felt challenged, earned high grades, and became more interested in the subject of the course (Wallace, 2009). Fifteen high school students in an online chemistry course reported satisfaction with their learning, which included conducting labwork in their homes

(Böhmová & Roštejnská, 2009). The five HA/GT students participating in an online writing course in Potts' (2019) study enjoyed their academic experience, but all stated a preference for more social interaction. The need for HA/GT students to interact with intellectual peers (Rollins & Cross, 2014a; Steenbergen-Hu et al., 2016) applies to online environments as well as in-person ones. Grouping like-ability students in a virtual setting can connect students with a shared interest in high-level subject areas.

When the COVID-19 pandemic closed schools in March of 2020, technology made it possible for them to continue to operate. Teachers took crash courses in turning their in-class instruction into an online format and schools distributed laptops and internet hotspots to students who needed them. Nearly every student in the US experienced virtual learning. The difference, however, between this *emergency remote teaching* and carefully designed, thoroughly planned online instruction, is great (Hodges et al., 2020). Whereas before the pandemic, an instructional technology support team may have spent months and sometimes years in the planning and design of an online course, the pandemic forced the process into weeks. Even when this process was done well, the response to the emergency remote teaching cannot be separated from the other stressors of the time, with lockdowns and fears of a deadly disease occurring at the same time students sat at their computers, at home, day after day. HA/GT students around the world were in the same situation as their peers and several studies documented their experiences. HA/GT students in South America (Valadez et al., 2020), Albania (Duraku & Hoxha, 2021), Saudi Arabia (Aboud, 2021; Alshehri, 2022), India (Chowkase et al., 2022), Ireland (Cross et al., 2022) and the United Kingdom (Hill & Madigan, 2022) were found to be unmotivated, struggling to regulate their learning behaviors, and dissatisfied with their online learning experiences. These experiences with emergency remote teaching are not equivalent to that of HA/GT students taking pre-pandemic virtual courses, but they will inform the acceptance of virtual options in the future.

Research on Residential Gifted Programs

One model for offering advanced education to high-ability high school students is the year-long, residential program. There are none of these types of Governor's Schools in Virginia, although one was approved in 1990 (States, 1990). Thirteen states operate one or more of these residential high schools: in [Alabama \(2\)](#), [Arkansas](#), [Indiana](#), [Illinois](#), [Kansas](#), [Kentucky](#), [Louisiana](#), [Maine](#), [Mississippi \(2\)](#), [North Carolina \(2\)](#), [Oklahoma](#), [South Carolina](#), and [Texas \(2\)](#); Conrad, 2017). Table 7 includes descriptive information about several of these schools. In most cases, students who qualify are offered room and board and a 2- or 3-year education (grades 11-12 or 10-12) at an extremely high level. The majority of programs are STEM-oriented, but several states offer arts or humanities programs. These may be incorporated within the STEM program, as at the Indiana Academy for Science, Mathematics, and Humanities, or standing alone, as at the Alabama School of Fine Arts. Residential schools that follow an early university entrance model offer college courses to students while they are completing their high school degrees (Cross & Miller, 2007; Olszewski-Kubilius, 2010).

The goal of these residential programs is to maintain the state's competitiveness on the global stage by bringing together highly capable and motivated students of all socioeconomic strata from across the state for an education that maximizes their potential (Cross & Miller, 2007; Cross & Frazier, 2010). The original emphasis on STEM curricula in these residential schools was intentional. Rural areas in North Carolina, the first state to create a residential Governor's School, were unable to provide advanced education to their HA/GT students at a time when global competition in STEM research and development was escalating (Cross & Miller, 2007). By bringing students without access together and providing an advanced, accelerated curriculum, the entire state would benefit. Schools for the arts and humanities have received less attention than those focused on STEM, but these have encouraged the development of creativity, artistic skill, and a related identity among hundreds or thousands of students whose talents and interests are more in those areas.

As programs funded by state legislation, most of these residential academies do not charge tuition, although some do (e.g., Texas). Some programs charge fees for room and board or other costs (e.g., textbooks). The location of the program matters to the costs and operational considerations. In some cases, faculty members are employees of the school, but in others, faculty are university employees. The schools may be on a university campus, taking advantage of university facilities and courses. A residential academy may be housed on a university campus, but with full-time faculty employed by the school rather than the university (e.g., Indiana Academy). The teacher:student ratio is kept as low as possible in these academies. Some schools have their own facilities, including classrooms, labs, cafeterias, and dormitories (e.g., North Carolina School of Science and Mathematics; NCSSM).

Residential high schools bring together adolescents at a time when their identities are coalescing (Erikson, 1963). With a multitude of experiences focused on becoming scientists, mathematicians, and artists or scholars, these schools offer a powerful environment for the development of a professional identity in one of these fields (Coleman, 2001; Oyserman, 2007). Outcomes among the graduates of state-funded residential high schools tend to be quite positive. Not only are nearly all graduates in some states accepted into fine colleges (e.g., Indiana Commission for Higher Education, 2017), many go on to graduate from college in their high school's area of specialization. NCSSM reports more than 2/3 of their graduates have master's or doctoral degrees, "more than five times the national average" (Coble, 2020). NCSSM prides itself on the high number of exceptional STEM-trained students who stay in the state where they attended high school, contributing to their communities professionally and economically (Coble, 2020).

A residential school becomes a proxy for family, and it is critical that administrators recognize that role. They must pay close attention to students' psychological needs when parents are unavailable to do so. The residence life component is a high priority for successful programs (Cross & Frazier, 2010). Many residential high schools have dedicated counseling staff on the

Table 7*Descriptors of Sample Residential Schools*

State	School	Curricular Focus	Costs (to in-state students)	Grades	# Students Served	Founded	Model	Notes
Alabama	Alabama School of Mathematics and Science	STEM	None	10-12	~253	1989	Stand-alone campus (15 acres)	https://www.asms.net/
	Alabama School of Fine Arts	Arts: creative writing, dance, math-science, music, theatre arts, and visual arts	No tuition; room & board costs apply	7-12	~326	1971	Stand-alone campus; Partially residential for students beyond commuting distance	https://www.asfa.k12.al.us/home Alabama students pay a small semester matriculation fee, but no tuition. Students from outside Alabama pay tuition, which the school sets annually. Residential students pay room and board costs, set annually.
Illinois	Illinois Mathematics and Science Academy	STEM	Annual student fees based on family ability to pay; \$600-\$6543	10-12	~650	1985	Stand-alone campus	https://www.imsa.edu/ Faculty employed by IMSA.
Indiana	The Indiana Academy for Science, Mathematics, and Humanities	STEM + Humanities	No tuition; Student fees of \$1480/semester	10-12	~200	1988	On campus of Ball State University	https://academy.bsu.edu/ Faculty employed by IASMH.

State	School	Curricular Focus	Costs (to in-state students)	Grades	# Students Served	Founded	Model	Notes
North Carolina	North Carolina School of Science and Mathematics	STEM	No tuition; no room & board	11-12	680 (+ 300 on new campus)	1980, additional campus 2022	Two stand-alone campuses – Durham & Morganton	https://www.ncssm.edu/ Offers an online-only program: https://online.ncssm.edu/
	University of North Carolina School of the Arts	Arts: performing, visual, and moving image	No tuition; room & board \$3101/year	9-12 (7-8 may apply)	~278	1965	On campus of UNC	https://www.uncsa.edu/ Two dedicated dorms for high school students.
Texas	Texas Academy of Mathematics & Science	STEM	Based on family ability to pay; \$0-\$18,790	11-12	~375	1987	On campus of Univ of North Texas	https://tams.unt.edu/ Part of the university, Early university program; Students are actually UNT students; Faculty employed by UNT; All students completing FAFSA or TAFSA receive \$8500 scholarship
	Texas Academy of Leadership in the Humanities		Students receive 15 credits tuition free at LU; must pay room & board (~3K - ~5K)	11-12	50	1993	On campus of Lamar University	https://www.lamar.edu/texas-academy-of-leadership-in-the-humanities Faculty employed by LU

lookout for exceptional stress, anxiety, and depression, levels of which can be high in the “hothouse” life of students in these scholarly settings (Coleman, 2001). Despite the high pressure, research indicates these students tend to be resilient and rarely require clinical intervention (Rollins & Cross, 2014b).

AYGS Models

AYGS differ from other programs designed to support HA/GT students in Virginia. Students attending AYGS commit to engaging in advanced academics daily (or the equivalent depending on school schedules) throughout the school year. As programs designed to meet the specific needs of each region, the Virginia AYGS have differing formats and schedules (see Appendix A). Of the 19 schools, three are full-time, with students receiving all their coursework at the AYGS. The other schools share time with one or more local schools in their region. Students attending these shared-time schools take a portion of their coursework at their local school. These vary according to the curricular focus of the AYGS but are generally core courses or electives. One shared-time AYGS is virtual (A. Linwood Holton GS), with periodic in-person meetings, and two others feature virtual coursework alongside their in-person courses. There is presently no residential AYGS in Virginia, where students live on a campus and attend advanced courses full-time. Participating school divisions are required to provide transportation to the AYGS. How this occurs differs, with some divisions providing bus service from the base school, others requiring students to meet in a central location, and others picking students up at their homes.

Shared-Time AYGS Models

Among the 16 AYGS built on a shared-time model, a variety of schedules have been implemented. Some AYGS have only 90 minutes with their students and some options allow students to take as few as one class per semester. The majority of shared-time AYGS have students for 2 ½ to 3 ½ hours per day. The courses may be offered in the mornings or afternoons. In some schools, morning and afternoon classes are attended by students in different school divisions, in others, morning and afternoon classes are for different grade levels.

Nearly all shared-time AYGS require transportation to and from the AYGS site during the school day. Buses are usually provided by the participating school divisions. Students may be required to catch the bus at their base school, although some divisions have buses pick up from the students’ homes. For those schools beginning earlier than the regular school day, this can mean very early departures. Depending on the geography of the region, students may spend up to an hour each way on the bus. Some counties served are 50 miles or more from the location of the AYGS. Some AYGS have minimized the transportation issue by offering their programs in multiple sites. One school division is implementing a policy requiring students in specialty programs transfer to the school where the program is housed. This model has not yet been tested, but it may affect AYGS enrollment, particularly among economically disadvantaged students who may have no means of transportation to their new school.

Shared-time AYGS rely on the base school to provide courses outside their specific curricular area. For example, history and social sciences are not courses taught in a shared-time STEM program, but they are required for graduation (VDOE, 2022). The AYGS curriculum may give rise to related extracurricular activities (e.g., Governor’s School for the Arts). Traditional extracurriculars such as sports or band, however, are generally provided by the base school. It should be noted that the Governor’s School for the Arts is referred to as a “full-day” program because of the substantial hours required beyond the school day in rehearsals, practice, and the like. However, because their students take some of their classes in their base school, it fits the shared-time model.

Each of the shared-time AYGS approaches its community building goals differently. The community of learners includes students, teachers, and, where possible, community members. Positive teacher-student relationships are a goal for all AYGS. Some AYGS assign faculty mentors and provide time for advising (e.g., New Horizons). In some AYGS, students are given free time to interact. These may be work-related or social interactions. The location and schedule of the program impacts the possibility of bringing students together. Student interactions across sites are sometimes facilitated by virtual connections. Assigning cohort groups and peer mentors foster immediate connections, helping to build relationships among students who might otherwise not find common space or interests. Some AYGS address location issues by coordinating team-oriented research projects across sites. Field trips have a social aspect in addition to the academic content they generally provide. Overnight field trips provide an intense learning and social experience for the students. Summer programs and strong alumni connections maintain students’ identity beyond their AYGS schedule. The community is expanded by partnerships outside the AYGS, such as with local universities, community colleges, and local arts organizations.

Full-Time AYGS Models

The three full-time AYGS – Maggie L. Walker, Appomattox Regional, and Thomas Jefferson – occupy their own buildings. Participating school divisions provide transportation for their students. The full day of classes includes traditional classes (required and elective) in addition to those that are a part of the curricular focus. These schools offer extracurricular activities similar to those of traditional schools. The holistic experience of a full-time school offers many opportunities for building students’ identities as members of a community of learners. In addition to the shared experience of a full-day curriculum, students can experience school dances, sports, band or orchestra, and social clubs with their AYGS peers. Study and interaction periods may be built into the full-day schedule. Most of the community building activities present in the shared-time AYGS are also present in full-time schools.

Virtual AYGS Models

Some of the AYGS offer an occasional course or activity in a virtual format, but only one is built almost entirely on a virtual model and two are hybrid, offering both in-person and virtual courses. A. Linwood Holton is a virtual program, with periodic in-person interactions to build community. Serving 17 school divisions in primarily rural Southwest Virginia, the program offers online courses throughout the school day. Students may take any combination of courses to make up their full school day or only part of it. Only the director, an assistant and a “student success specialist” require office space. Teachers are hired for remote instruction as they are needed for additional or new courses. Students take courses in their base school, so transportation is not required, except in the case of special community building activities focused on their science courses. Students are brought together from two to five times a year to meet one another in the context of their coursework. The AYGS community building goal is a challenge for the virtual programs, but ALHGS is seeking ways to expand opportunities for students to meet each other through shared research projects.

Two AYGS – Mountain Vista Governor’s School (MVGS) and Blue Ridge Virginia Governor’s School (BRVGS) – are hybrid, including a regular online component in their programs. Students at MVGS spend 3 ½ hours in their shared time program, traveling to the AYGS site in the morning. They take an additional one-hour online course before returning to their base school for traditional classes and extracurricular activities. At BRVGS, students have a shared-time experience in grades 9, 10, and 12. In the 11th grade, students take a college-level, online course through a Virginia university or taught by a BRVGS instructor. BRVGS students remain in their base school for all instruction.

Stakeholder Impacts

There are advantages and disadvantages to each of these models. Different stakeholders are affected differently by the choices made in the AYGS design. For example, sharing students’ time with a local school can reduce the number of courses the AYGS must offer (see Table 8). For school administrators, this may be economically advantageous. A regional program, however, serves students from multiple school divisions. When the AYGS is located in one school, students from other divisions must commute to attend the specialized program. Commuting requires time and can introduce significant risk, particularly in the case of students driving themselves and particularly in rural regions.

The model chosen also affects the social environment students experience. In a shared-time GS, students have less opportunity for interaction with their fellow GS students. They have more time, however, to make or maintain friendships in their base school, with a more heterogeneous population. Ties to the communities of which they were a part before coming to the GS may be very important to them. A shared-time model allows such ties to be maintained.

On the other hand, a student may not have felt a part of the community in their base school and would welcome more time with intellectual GS peers.

A full-time model allows students to build a strong sense of community, with the many hours of contact time and varied activities available with peers and teachers. Travel time is reduced when students do not have to commute during the school day. All interactions would be with other members of the AYGS, including in extracurricular activities. This may be positive or negative, depending on the student. Economically, full-time AYGS incur costs a shared-time school does not. For shared-time AYGS, the base school maintains resources such as a cafeteria, school library, or gymnasium, in addition to all the operating and instructional costs associated with providing a full schedule to its students. A full-time AYGS must maintain these resources on its own.

Shared-time AYGS partner with their local school divisions and students remain a student in their base schools. Student success can be attributed to both the AYGS and the base school, leading to a positive connection between the two schools. A standalone, full-time AYGS does not have these same connections with the participating school divisions. This can also be attributed to the grades served: full-time AYGS serve students in grades 9-12, whereas many of the shared-time schools serve students in older grades, after they have had time to form friendships and join activities at their base schools.

Stakeholder Attitudes Regarding Shared- and Full-Time AYGS

In general, survey participants in all stakeholder groups agreed that shared-time schedules are adequate to meet students' needs for advanced academic development (see Figure 13). Students were slightly more likely to agree with this statement than parents²⁴. Nearly a third (30.7%, $n = 360$) of respondents agreed with the statement, "All AYGS should have full-time schedules." Many of those who agreed were parents, but respondents from all stakeholder groups said they "somewhat" to "strongly" agreed that all AYGS should be full time. Parents tended to be more in favor of all AYGS being full-time (see Figure 14) than students or school employees²⁵. On average, both students and school employees disagreed with all AYGS having full-time schedules. Open-ended comments from survey respondents reflected concerns for students' social experience, criticisms of the travel required for shared-time options, concerns about the curriculum content in either model, and the necessary resources associated with both.

²⁴ Kruskal-Wallis H test: ($\chi^2[5] = 14.65, p < .05$)

²⁵ Kruskal-Wallis H test: ($\chi^2[5] = 30.24, p < .001$)

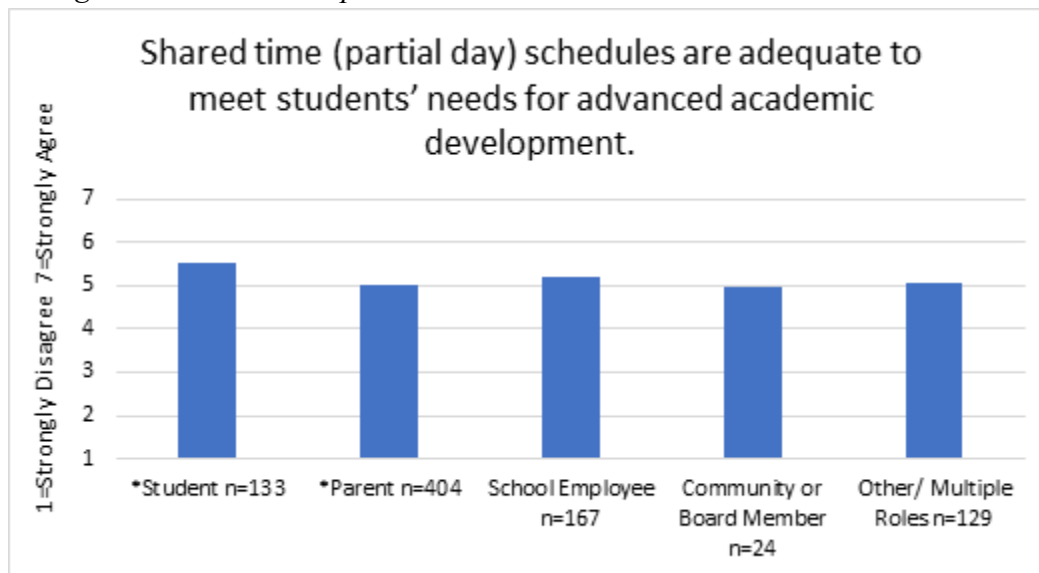
Table 8*Potential Impacts on Stakeholders*

Format	Students	Parents	Teachers	Directors	Community Members
Shared-Time	Commute required if not in home school; able to participate in extracurriculars at home school	Transportation logistics during school day	Reduced time for instruction	No need to provide core/elective courses; Transportation coordination with participating divisions	Students on roads during school day; Increased need for travel resources
Full time	Commute required if not in home school	Transportation logistics before and after school	Full time for instruction	Need to provide all coursework, electives, extracurriculars; Transportation coordination with participating divisions	Students on roads during school day; Increased need for travel resources
Virtual	No commute required (depending on location); expanded options for coursework; interactions with peers and teacher differ	Need to provide access to technology and suitable location (if at home)	Hands-on instruction not possible; Interactions differ from in-person	Curriculum should focus on courses that can be taught virtually; reduced facilities expenses	Requires broadband availability; could encourage out-of-school options for interaction

Format	Students	Parents	Teachers	Directors	Community Members
Residential	No daily commute; intense social and psychological experience	Need to support child at a distance; reduced interaction		Extensive management of facilities, instruction; Need for greater psychological support, residence life administration	

Figure 13

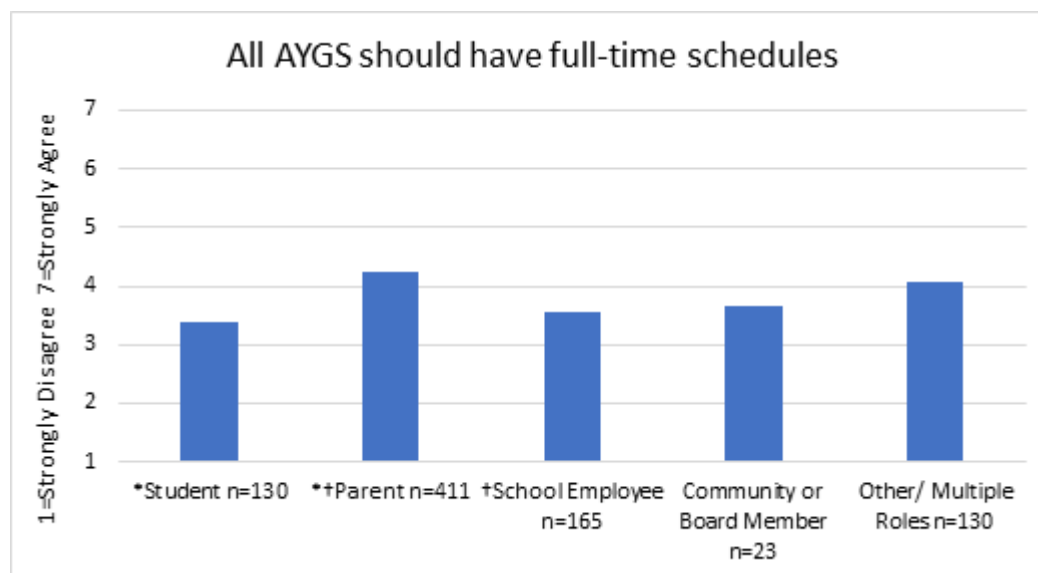
Average Stakeholder Group Attitudes toward Shared Time AYGS Schedules



Note: Scores above 4.0 indicate agreement.

* $p < .05$

Figure 14
Average Stakeholder Group Attitudes toward Full-Time AYGS Schedules



Note: Scores above 4.0 indicate agreement.

*† $p < .01$

Community

The most frequent open-ended comments regarding shared- or full-time AYGS models were related to concerns about students' communal experiences. These comments reflected a concern for losing one's base school community if they attend a full-time school and concern for the social impact of attending an AYGS on a part-time schedule. Shared-time schools allow students to maintain their community at the base school, which many regarded as an important feature. The ability to participate in regular classes and extracurricular activities at the base school allows students to maintain ties with friends from their former school or to meet students outside of their AYGS. One respondent suggested the lack of extracurricular activities at shared-time AYGS is associated with a weaker sense of community there. The identity cultivated by school spirit activities and sports events was seen as an important part of the high school experience.

Nearly all directors in the shared-time AYGS commented on the value of the students' ties to their base school. The shared-time model "gives the kids best of both worlds" (DIR1360). One stated, "We give them that opportunity and that extra social engagement of being around students that are like-minded or whatnot, but they don't have to give up being part of their normal school community." (DIR1671).

With the sense of community being a priority for AYGS, many respondents to the general and specific options of the survey, representing both shared- and full-time AYGS,

expressed concerns for students' psychological well-being. Some students and parents lamented the extreme pressures of the AYGS curriculum. Students at shared-time AYGS had responsibilities at both their AYGS and the base school that could be in conflict with each other. One parent reported the priority of completing SOL's at the base school left her child out of the loop on work that continued at the AYGS, for example. Long hours of homework kept students from participating in activities they would have liked to engage in. The travel required for a shared-time AYGS "had a draining effect" (MUL230093) on students. In interviews and survey responses, alumni reported having experienced high levels of stress and little support for their mental health. Some parents also reported a lack of support for their students' mental health, particularly in the post-pandemic era. Despite these examples, average responses across all stakeholder groups was agreement with the statement that "[My AYGS] effectively supports the mental health and well-being of the region's high-ability/gifted students." (see Figure 15). Note, however, that the students' responses were statistically significantly lower than parents', school employees', and community or board members' responses²⁶. In open-ended comments, parents, students, and school employees gave examples of AYGS support for students' mental health and well-being. At least one school has a program designed to teach organizational and coping skills. There was agreement among respondents to the general and specific surveys that it *should* be a priority for AYGS to effectively support students' mental health and well-being (see Figures 15 & 16).

Survey respondents noted that the community of learners at AYGS did not have much cultural diversity and sometimes was not demographically representative of the region it serves. The programs are, however, representative of students participating in educational opportunities that feed the AYGS, such as gifted or honors programs. In most AYGS, admissions are not granted by the AYGS. Students are selected by the participating school divisions, which may have different criteria for AYGS participation, even in the same region. Several directors recommended attention to the need for resources and support to racially and economically diverse students in the early grades, so a broader pool of students will be eligible to participate in AYGS by the time they reach high school age. As one school employee responded,

Our student body is not as diverse as the overall student populations of some of our participating school divisions, but it is reflective of the student bodies seen in the courses that are pre-requisite to our program. Thus, it appears that the issue of cultural diversity, and the needs that might be associated with diversity, might be more appropriately focused on students in the elementary and middle schools. That said, within our community building efforts you will find intentionality regarding respect and support for diversity and differences among the members of our community (SE230500)

²⁶ Kruskal-Wallis H test: ($\chi^2[5] = 29.17, p < .001$)

On average, respondents from all stakeholder groups agreed that support for cultural diversity was effective at their AYGS (see Figure 15). There was strong agreement that this *should* be a priority for AYGS and this was true for respondents to the general survey, as well, with one exception. Parents responding to the general survey were slightly less in agreement than school employees²⁷ that AYGS should make it a priority to support the culturally diverse needs of HA/GT students in the Commonwealth (see Figure 16).

Transportation

Many parents, students, school employees, and community or board members were concerned about the travel time required to participate in a shared-time AYGS. Travel during the school day results in lost instructional or social time, affecting academic performance and peer relationships. It sometimes causes students to miss academic opportunities or school events at the base school. In addition to the disruption caused by the amount of time students spend in travel to the AYGS, it is also a barrier that keeps some eligible students from even applying.

AYGS must rely on their school divisions to provide transportation. Where resources are stretched thin, transportation to the regional AYGS may be affected. Smaller school divisions, in particular, may be challenged by the need to provide services. When students must meet at a central pickup site, that can be an additional barrier to their attendance. In interviews, directors referred to the inequity of transportation requirements. Economically disadvantaged students may be excluded from an AYGS if additional transportation to get to a central pickup site, for example, was required. Some AYGS start school earlier than the base school. In those cases, it is not possible to take the regular bus to the base school to then be transported to the AYGS. Schedules of multiple school divisions can also be a problem for transportation to the AYGS. When one division is closed because of the weather, the AYGS may be open, but students in that division are unable to get to school. School divisions may not have funding for buses that run late to transport students who have been in after-school activities, which can limit students' access to opportunities.

Many survey respondents noted that a full-time AYGS would solve the issues caused directly by the need to travel between schools, although they often qualified their responses with caveats related to the positive experience provided by shared-time AYGS. One respondent recommended the AYGS be placed at every high school, eliminating the need for travel during the day. Another parent described a negative experience with such a model in a school their child previously attended, "Specialty center students were marginalized by the rest of the student population, and those classes that were outside of the specialty center focus were totally inadequate." (MUL230532).

²⁷ Kruskal-Wallis H test: ($\chi^2[5] = 15.19, p < .05$)

Figure 15
Mental Health and Cultural Diversity Support (Specific Survey Responses)

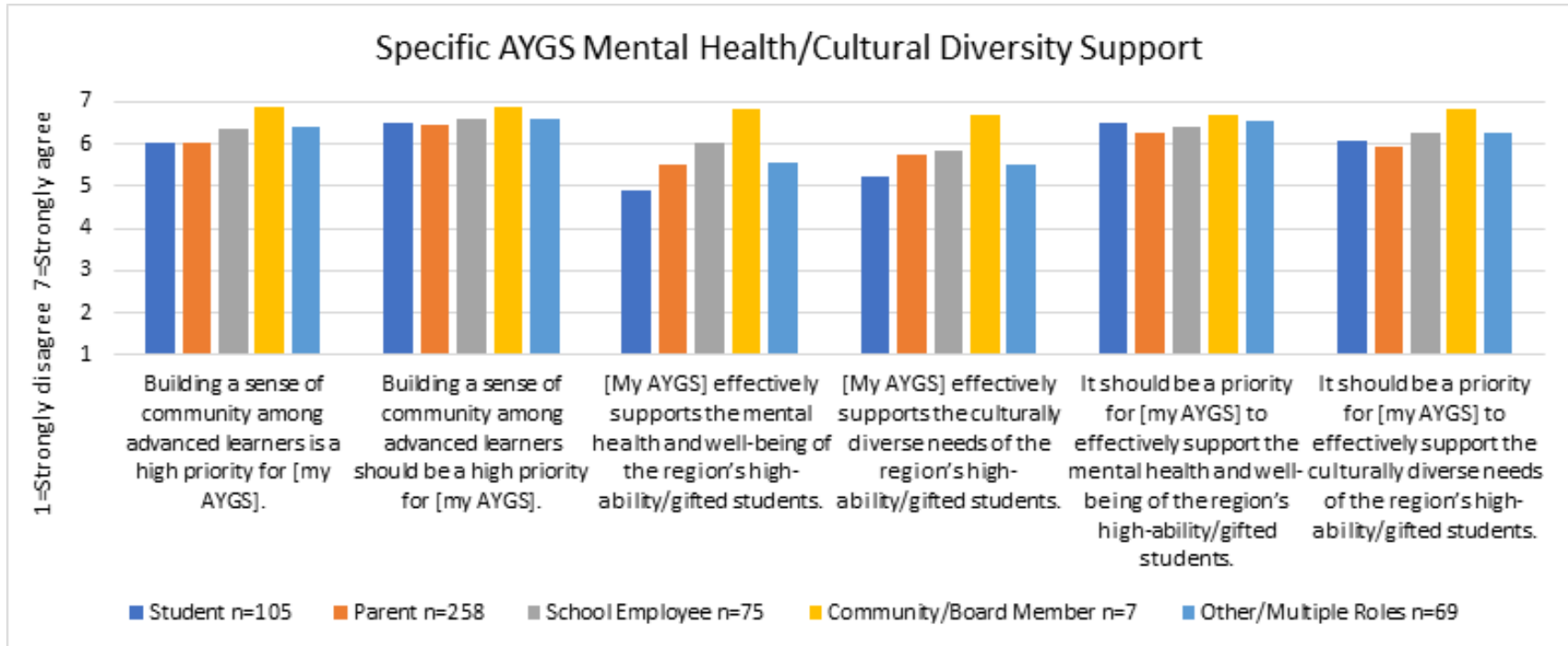
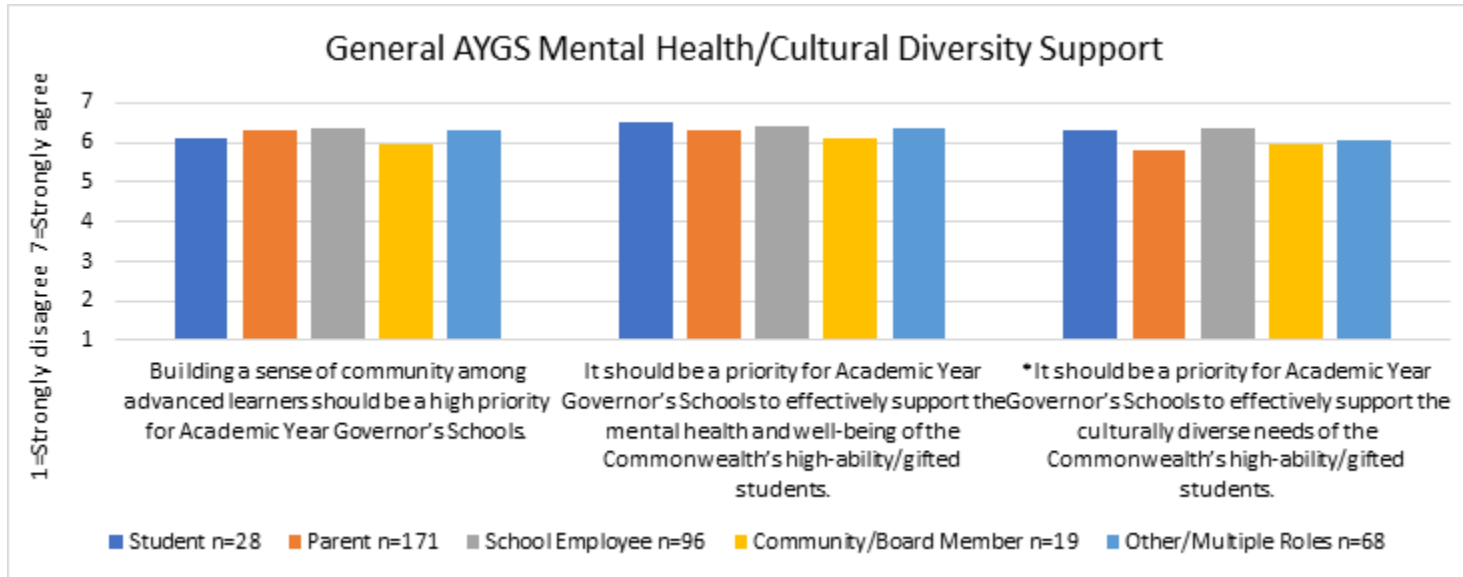


Figure 16

Mental Health and Cultural Diversity Support (General Survey Responses)



* $p < .05$

Curriculum

The curriculum in a shared-time model is a hybrid of specialized and traditional courses. Several respondents commented that elective or even required courses are sometimes not available to GS students, whose schedules interfere with options. One respondent expressed a concern that these scheduling problems can impact a student's ability to obtain an Advanced Diploma. Some parents and students felt the classes taught at the base school were not adequately rigorous. Some students do not have appropriate options at the base school. As one respondent explained, "There isn't much for them to do when they return to school, particularly in person. Students end up taking Virtual Virginia classes or going home in an abbreviated schedule." (PAR230570). This was a concern for some of the directors, as well. The need to travel to a school where their intellectual needs were not being met seemed wasteful.

Shared-time schools might be able to offer a wider array of courses if they were full-time. The narrow curricular focus of the AYGS could be limiting in a full-time AYGS, especially to students who want a more well-rounded academic experience. Many parents were strongly in favor of full-time AYGS because they wanted their children to have a full day of advanced curriculum. In general, students, including AYGS alumni, were less so, in part because of the workload and pressure they experienced in their AYGS coursework. One student described the "parent's chokehold over their children's lives" (STU09001) and the unrelenting pressure students felt to achieve. An alumna of a full-time AYGS described trying to sleep during her lunch period, because rehearsals and schoolwork were so demanding. Classes in the base schools were a kind of reprieve from the work required at the AYGS, according to some students.

Resources

Many interview and survey participants were concerned that AYGS would not have the resources to provide a full-time option. Added faculty, required courses outside the AYGS curricular focus, and the management of scheduling for the expanded program would require resources they presently do not have. A small AYGS would have difficulty offering all the activities provided by a base school. Small programs would need to increase enrollment to expand to full-time. One respondent recommended a $\frac{3}{4}$ day be considered, with the $\frac{1}{4}$ shared with the base school for "sports and other social activities" (PAR230324). With a shared-time program, teachers "have time to collaborate with their colleagues across the curriculum to create opportunities, projects, and learning that cannot be created in an hour of planning every other day." (SE230073).

Facilities are particularly inhibiting to offering expanded access to AYGS. Most directors are utilizing all their space to manage their current programs. Some shared-time programs maximize the number of students served by offering morning and afternoon classes to different groups. Even when there is a desire among school divisions to support more AYGS students, there is not the available capacity from a facilities perspective. Space was also an issue in

building community among AYGS students and faculty. In some settings, there is no facility large enough to hold the combined members of the community. The flexibility of not having their own building was a positive to one director, who described the options students have because they are able to take advantage of the facilities at the university campus on which they are housed.

Equity

The specter of inequity was raised with the suggestion that all AYGS be full-time. Such a scheme would “create a brain drain in our public high schools. This systemically creates elitism and inequality.” (SE231061). Segregation by “perceived ability” (SE230533) also raises fears of inequity. Gifted programming is often challenged as lacking a strong argument for identification of participants (e.g., Heuser et al., 2017; Peters & Borland, 2020). As one director stated, however, ability is just one aspect of the selection process: “we [are] catering to a highly motivated, high achieving kid, whether they're labeled gifted or not” (DIR1225).

Stakeholder Attitudes Regarding Virtual Coursework

In surveys and interviews, stakeholders from across the state expressed their views about virtual options for HA/GT students.

Effectiveness of Virtual Coursework

Attitudes about the effectiveness of virtual coursework was mostly negative (see Figure 17). On average, respondents disagreed that virtual coursework was effective in fostering social interaction and that it provided an appropriate challenge for HA/GT students (see Figure 17). Respondents in the different stakeholder groups did not differ in these attitudes²⁸. Respondents from large cities had even higher levels of disagreement with the notion that virtual coursework could foster social interaction than did those in suburban or rural settings²⁹. Perhaps to a large city dweller, where there are more opportunities for social interaction, a virtual option seems less effective than it would to someone in a less densely populated area. Similarly, large city respondents disagreed even more strongly than rural respondents that virtual coursework could provide an appropriate challenge³⁰. They may have more options in a large city for finding appropriate challenge than in a rural area. Average scores on both these items, however, were in the “Disagree” to “Somewhat Disagree range” regardless of the characteristics of the community. Respondents disagreed that the content in virtual courses would be easier than the content of in-person courses, but those in large cities were less likely than respondents in other locales to agree virtual course content was more difficult than in in-person courses³¹ (see Figure 18).

²⁸ All p s > .05

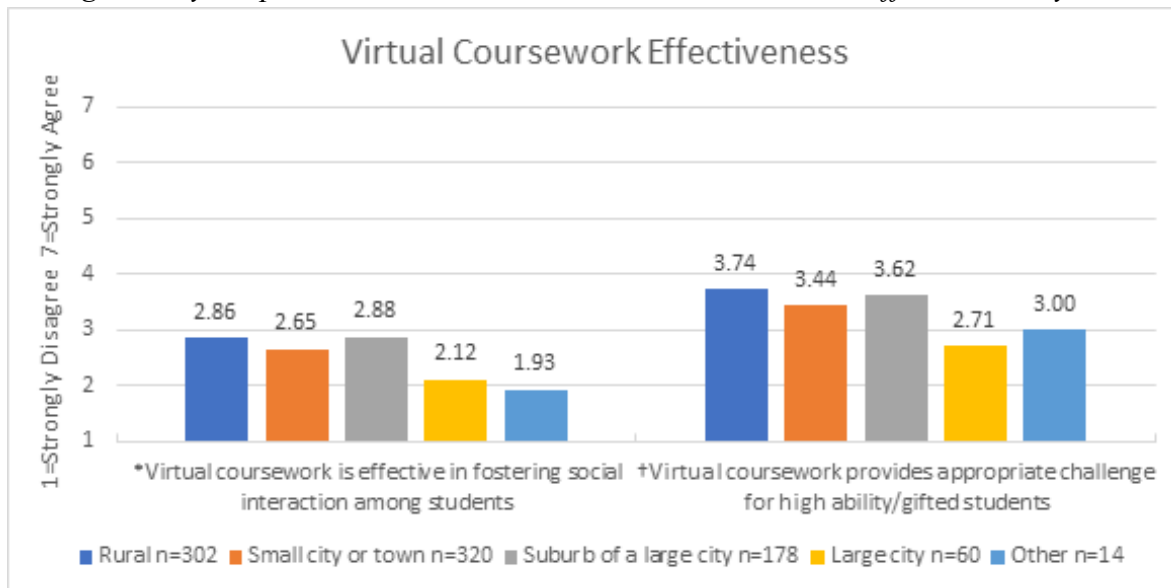
²⁹ Kruskal-Wallis H test: ($\chi^2[4] = 15.91, p < .01$)

³⁰ Kruskal-Wallis H test: ($\chi^2[4] = 17.76, p < .05$)

³¹ Kruskal-Wallis H test: ($\chi^2[4] = 20.78, p < .001$)

Figure 17

Average Survey Respondent Attitudes Toward Virtual Coursework Effectiveness by Locale

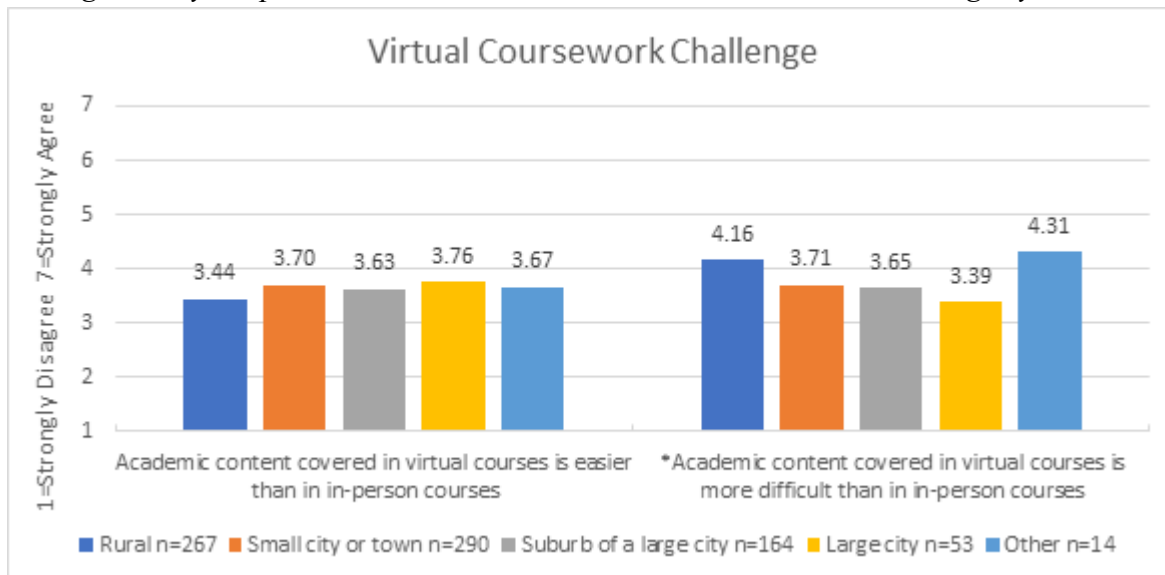


*Large city < suburb and rural, $p < .01$

†Large city < small city, suburb, and rural, $p < .001$

Figure 18

Average Survey Respondent Attitudes Toward Virtual Coursework Challenge by Locale



* Large city < small city, suburb, and rural, $p < .01$

Desirability of Virtual Coursework Options

Survey respondents were asked to rate their preference for the location, amount, and formats for virtual coursework, on a scale of 1 = “Not acceptable” to 10 = “Highly desirable.” Respondents from rural, urban, and other community classifications did not differ in their responses to these items. The majority of those who selected the “Other” location option for the three questions wrote in that no location, amount, or platform was acceptable, as they would prefer no virtual coursework. The preferred location for virtual coursework was a classroom in the student’s home school (see Figure 19). Students and parents were more in favor of taking virtual coursework at home than were school employees³².

On average, respondents were not in favor of students taking one class, a few classes, or a full schedule virtually (see Figure 20). Most acceptable – even approaching desirable – was no virtual coursework and occasional virtual experiences, such as speakers or electronic field trips. Students seemed to be more open to taking a few classes per term than were parents³³. Parents rated one class per term lower than did respondents who had other or multiple roles³⁴. To further clarify, respondents’ ratings for a variety of options appear in Figure 21. Note that not all respondents rated every option in Figure 21, resulting in different *ns*.

Among the virtual platforms, asynchronous, synchronous, or hybrid, respondents found synchronous the most desirable (see Figure 22). Hybrid courses also had a fairly favorable rating. Asynchronous coursework, which is taken independently by the student and includes no live component, was the least desirable of the three options. Students rated asynchronous coursework lower than hybrid or synchronous platforms, but their ratings of asynchronous coursework were higher than parents’, school employees’, and respondents with other or multiple roles’³⁵ ratings.

If respondents were favorably inclined toward virtual coursework, they would prefer it be taken synchronously in the student’s home or a classroom in the home school, and only occasionally. Most respondents would prefer students have no virtual coursework, however. They did not believe it could be effective in fostering social interactions or appropriately challenging for HA/GT students. They did not agree that the content of a virtual course would be easier or more difficult than in-person course.

³² Kruskal-Wallis H test: ($\chi^2[5] = 25.43, p < .001$); “Student’s home” option: Student Mean = 6.65, Standard Deviation = 2.50; Parent Mean = 6.87, Standard Deviation = 2.78; School Employee Mean = 5.58, Standard Deviation = 2.61

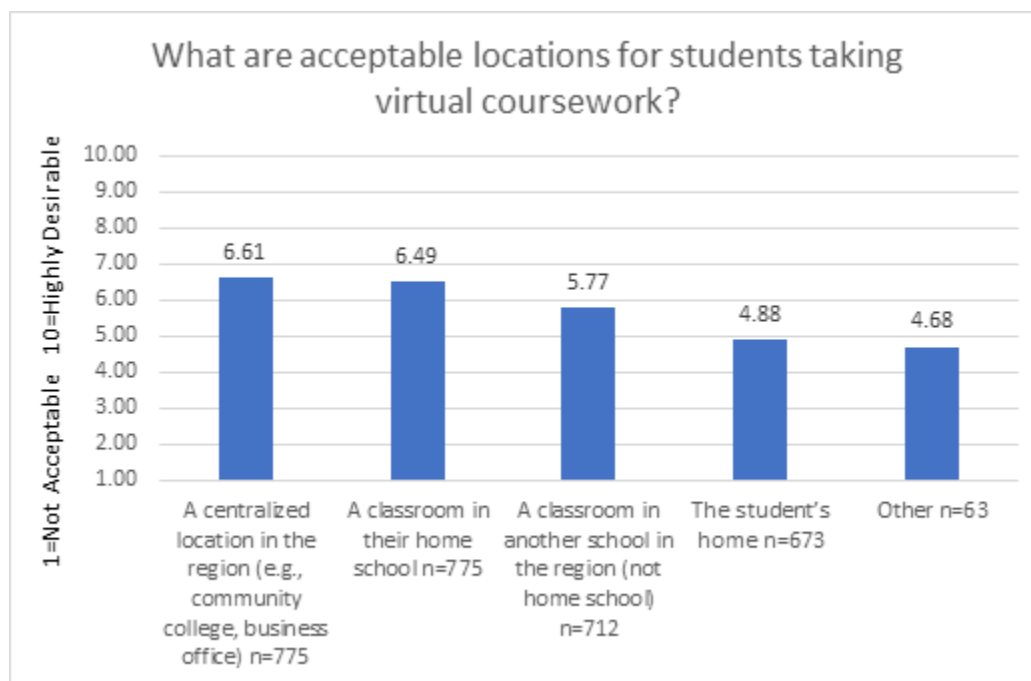
³³ Kruskal-Wallis H test: ($\chi^2[5] = 15.43, p < .01$); “A few classes” option: Student Mean = 4.65, Standard Deviation = 2.43; Parent Mean = 3.75, Standard Deviation = 2.53

³⁴ Kruskal-Wallis H test: ($\chi^2[5] = 15.20, p < .05$); “One class” option: Parent Mean = 4.66, Standard Deviation = 2.72; Other/Multiple Roles Mean = 5.77, Standard Deviation = 2.72

³⁵ Kruskal-Wallis H test: ($\chi^2[5] = 23.06, p < .001$); “Asynchronous” option: Student Mean = 5.80, Standard Deviation = 2.46; Parent Mean = 4.87, Standard Deviation = 2.45; School Employee Mean = 4.5, Standard Deviation = 2.22; Other/Multiple Roles Mean = 4.78, Standard Deviation = 2.25

Figure 19

Average Survey Respondent Attitudes Toward Locations for Virtual Coursework

**Figure 20**

Average Survey Respondent Attitudes Toward Amount of Virtual Coursework

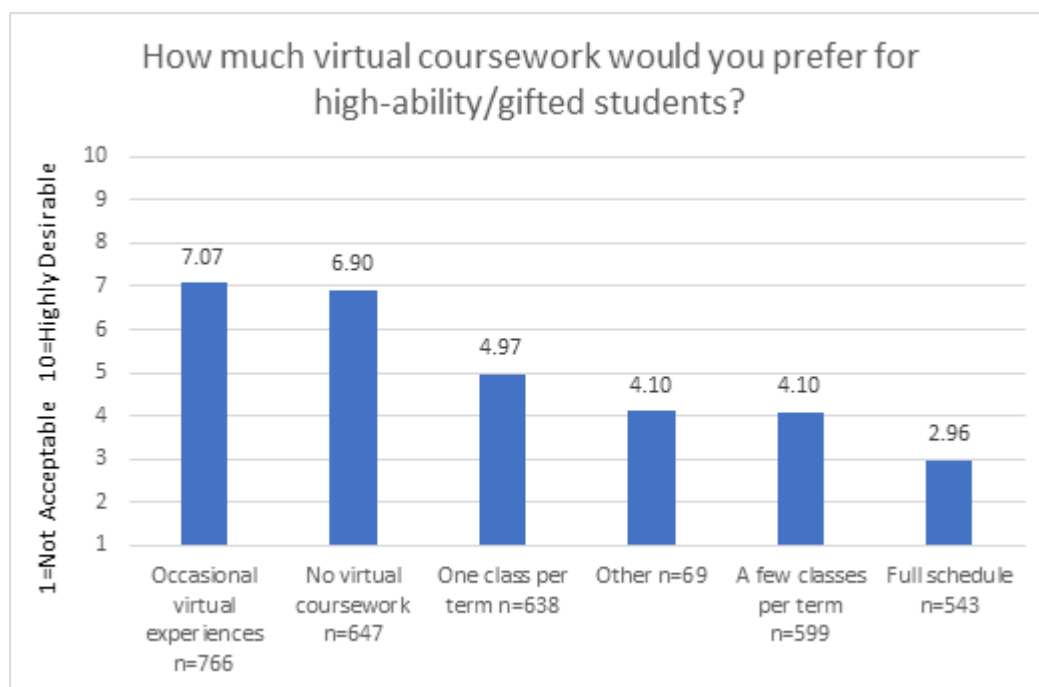


Figure 21

Percentage of Responses to Question “How much virtual coursework would you prefer for students eligible for Academic Year Governor’s Schools? Rate from 1=Not Acceptable to 10=Highly Desirable”

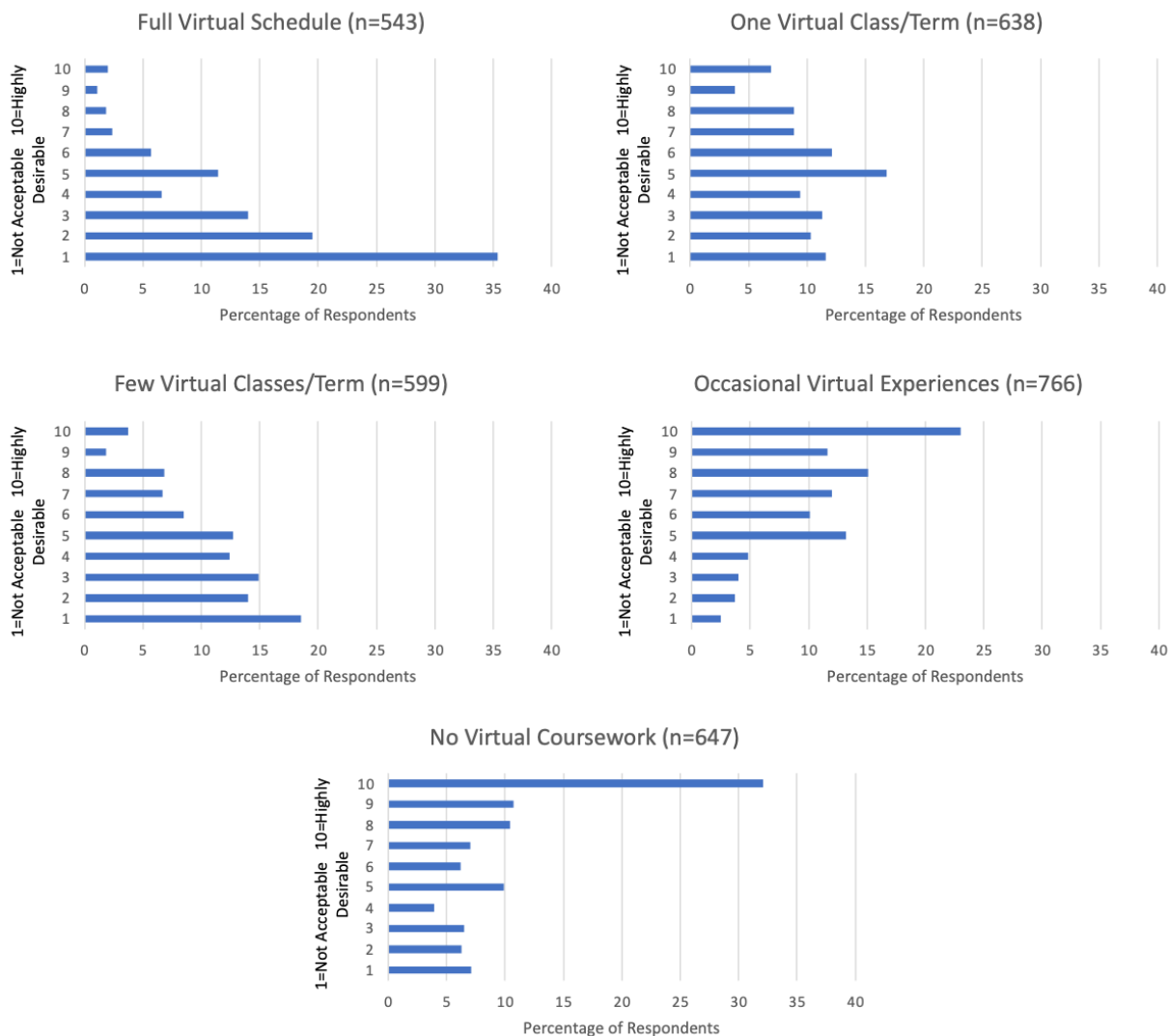
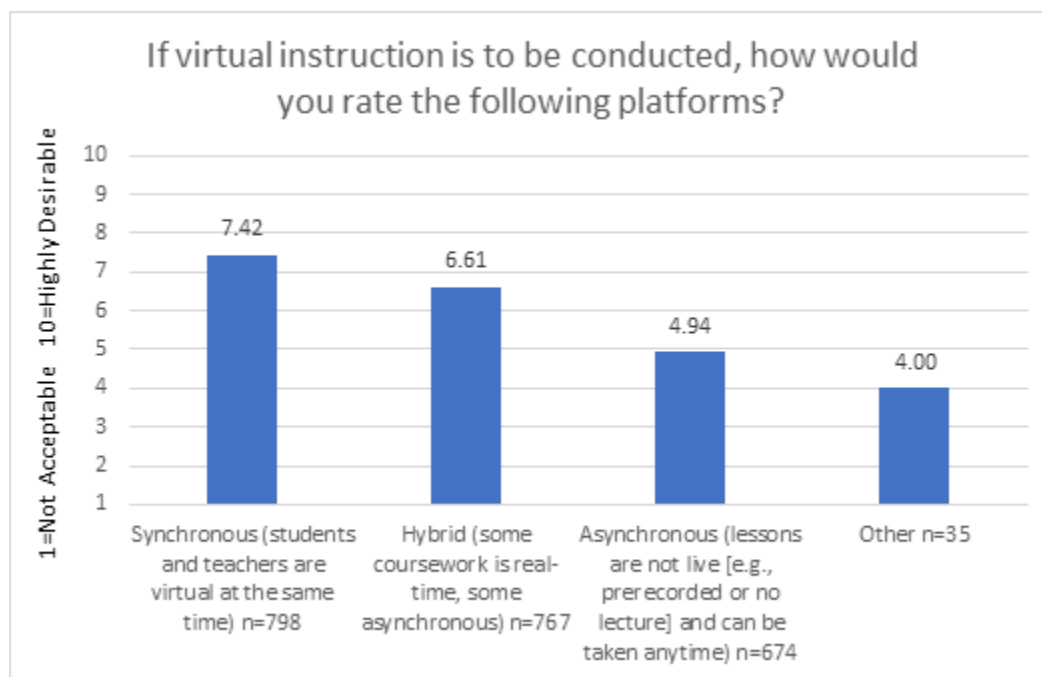


Figure 22

Average Survey Respondent Attitudes Toward Platforms for Virtual Coursework



Positive Features of Virtual Options

Despite the gloomy view of virtual coursework taken by most survey respondents, responses to open-ended items and interviews paint a more nuanced picture of support for this educational option. While the general perspective is that in-person instruction is better for learning, there are times when virtual options are effective in overcoming barriers. Several respondents commented that students who are ill and unable to come to an in-person class could benefit from a virtual option. One director commented on the value of having teachers who were familiar with virtual instruction when students miss their AYGS classes due to a snow day in their division, for example. Several respondents pointed out the value of virtual options for students who were ill or had field trips and needed to make up missed classes. In regions where school divisions are too far for students to commute to a central location, virtual courses allow them to receive advanced coursework that would otherwise not be available. This is also true when it is not possible to find a qualified teacher for some of the high-level courses AYGS students need. Several respondents suggested virtual courses are acceptable in situations where a course could not be offered except through an online option. Prerequisite courses are sometimes easily scheduled virtually when they would be difficult to get in person. In these cases, online courses may be available through Virtual Virginia, the state's partner provider of virtual courses for regular education.

Virtual options allow students at multiple sites or different sessions of an AYGS to work together on research or other projects. They also can enhance in-person instruction by supplementing the content with guest speakers, assessments, or brief virtual learning units. A number of respondents considered it appropriate for virtual options to be used as a supplement to in-person instruction. As one respondent stated, “Virtual options for AYGS programming should augment and/or expand, not compete, with the offerings that already exist in a division.” (MUL231137).

A few cases were reported of students preferring virtual coursework and thriving in an all-virtual environment, but this was not a common response. One parent wrote, “My child thrived with online instruction during Covid... getting assignments done early, being able to sleep in sans travel, and able to maximize outdoor/extracurricular activities, i.e., athletics and music.” (PAR230142). Other respondents knew or knew of students who preferred virtual to in-person courses.

Negative Features of Virtual Options

Survey respondents who submitted open-ended comments to the prompt, “If you would like to share comments about virtual options for Academic Year Governor's School programming, please enter them here” were overwhelmingly opposed to virtual options, with nearly $\frac{3}{4}$ of the 247 comments including a criticism of some kind. Many were simply opposed to virtual, preferring in-person instruction.

Harmful to Social Interaction

The most frequent objection related to how the virtual options affected personal interaction. AYGS students need to be in the physical presence of peers and especially teachers in the rigorous courses, many commented. In-person experiences lead to learning, from being able to easily ask questions in class to side discussions and after-class conversations, which respondents did not believe was happening in virtual classes. Respondents considered virtual coursework to be isolating, leaving students without social experiences at a critical time for learning to work together. Several respondents were concerned for the loss to a future society whose members had not been able to learn from social interactions. The sense of community that is so important to AYGS members would be diminished or lost altogether in a virtual setting. Some respondents were concerned for the mental health of AYGS students in a full-time virtual setting. One school employee commented, “Virtual learning is NOT a viable answer for many students. Not all HA/GT learners learn well virtually. Virtual learning inhibits relationship building and a sense of community connectedness which could increase mental health concerns.” (SE230632). Memories of the forced virtual experience during the pandemic were distressing for many, who could not imagine considering more virtual options for AYGS. As one parent stated, “Overall, no, not a fan AT ALL of remote options. Covid reinforced that, 100-fold. I'm shocked that it is being explored in what appears to be some depth in fact.” (PAR230824).

Detrimental to Learning

In their experiences with virtual courses, alumni and current AYGS students reported less satisfactory learning. One alumnus who had experienced AYGS both in-person and virtually reported, “I get so much more socially, intellectually, etc. from in-person classes than I do from online work.” (STU230554). A negative impact on learning was a frequent criticism from respondents in all roles. Asynchronous courses, with the inability to interact with the instructor or peers in real time, made learning more difficult. School employees reported observing students’ loss of engagement and motivation to learn, as this respondent described, “During the pandemic, we used hybrid instruction. The level of rigor was significantly reduced, and I noticed significant deficits in study skills, critical thinking and problem solving.” (SE230632).

A number of respondents commented on the difficulty of keeping students accountable in virtual courses. They cited students sleeping during courses, rampant cheating, and difficulty completing assigned work. One teacher who is also an AYGS parent worried about future effects on learning with the increased availability of artificial intelligence:

With the rise of ChatGPT and other resources, when remote high school students resort to finding and copying answers off the internet rather than engaging in the intellectual activity/thought process themselves and as a high school teacher let me reassure you that you cannot prevent this. They are far more clever than any system you can put in place. So they will come out having completed the tasks and have no ability to think for themselves, understand any concepts (MUL230954).

Parents described spending excessive time to help their students be successful in virtual courses: “In order to help my son through his virtual finance course (a state requirement), I sit with him while he goes through the material and talk with him about the course lessons while he completes them on the computer. This takes a lot of time out of my schedule.” (PAR230522). One respondent commented, “Please notice every time you see one of the online school commercials there is a parent sitting next to the student. If there is not an adult there to keep the students moving forward it will not work for the majority of the students” (MUL230544). If actually required to be successful in an online course, regular support at home would be problematic for many students. Another respondent suggested, “A way to ensure that students get the maximum experience would be to assign home school mentors to assist students in their studies.” (SE231061).

Inconsistent with AYGS Objectives

Respondents had much to say about the importance of in-person experiences to fulfilling the role of an AYGS. A community of learners cannot be fully realized in a virtual setting, many claimed. AYGS students could not achieve their potential for any number of reasons, such as an inability to interact effectively with the other AYGS community members, losing interest in

subjects taught fully online, and a lack of rigor in virtual courses. In survey responses and interviews, one frequently mentioned attribute of AYGS was the hands-on, collaborative nature of lab and field work, research, and performances. These activities were necessarily curtailed during the pandemic and some learning suffered as a result. Performing arts were singled out as extremely difficult to learn virtually. Laboratory work, including the collection of samples, was another example of normal AYGS activity that could not be carried out effectively online. Several respondents, including parents, school employees, and directors, predicted a drop in enrollment and difficulty with recruitment if AYGS migrated fully or in large part to a virtual platform. As one school employee commented, “If governor's school is online it really is no different than taking any of the other online classes offered through our local community college. Governor's school is about the experience and shared socialization. Without the in-person piece, it is no different.” (SE230482).

Could a virtual AYGS maintain the rigor for which AYGS are known? A number of respondents in all stakeholder groups did not believe so. One school employee commented,

I don't feel virtual options are appropriate for the research-based STEM instruction we do at [my AYGS]. During the pandemic, we used hybrid instruction. The level of rigor was significantly reduced, and I noticed significant deficits in study skills, critical thinking and problem solving. We do offer virtual options in extenuating circumstances, but they cannot take the place of in-person instruction. (SE230632)

Acknowledging the community of learners that exist at AYGS, one respondent commented, “The magic of [my AYGS] exists in the relationships and experiences created by the staff, and that cannot be replicated to the same degree in a virtual environment. Additionally, with the level of rigor expected, students need to have in-person access to their teachers.” (PAR230570). The concern that a move to virtual instruction would damage the reputation Virginia’s AYGS programs share as high-quality and rigorous was voiced by a number of respondents. As one parent suggested, “If you are considering this, create specialty courses in Virtual Virginia. Do NOT cheapen or dilute the Governor’s School’s programs & reputation please!” (PAR230080).

The experience of offering virtual courses during the pandemic convinced several of the directors that this format would not be optimal for their students and for achieving the objectives of their AYGS. As one director commented, “There's just not a reasonable replacement for the students than being physically with the teacher and with their peers for what we're doing.” (DIR1671). The directors did not dismiss virtual instruction out of hand for all AYGS, however. Several acknowledged the advantages (noted above) of these options for some regions. This comment was typical of the directors: “I don't mind all of us being a little different. It suits where the school is and the audience they're trying to reach. If Linwood is virtual, then so be it. It's what they need down there.” (DIR1360).

Conclusion

The various environments of the current AYGS offer advantages and disadvantages. While nearly a third of respondents, particularly many parents, were in favor of more full-time AYGS options, others did not agree that all AYGS should be full-time. As one respondent stated, “Programs have been developed to meet the needs of an area - or to take advantage of a resource - a building, access to arts facilities, specialists. No need or desire to make cookie cutter programs.” (PAR230208). Although the stakeholders have concerns about issues such as transportation, curricular foci, and resources, support for the programs outweighs most concerns (see Chapter 3). There was widespread disagreement that virtual options can be effective. Some of this rejection may be due to experiences of virtual school during the pandemic. Emergency remote teaching was a unique requirement during the COVID-19 crisis and is not fully representative of other virtual applications. The shared experience, however, has resulted in little appetite, at least among the participants in this study, for increased virtual coursework in the AYGS. Residential AYGS are a possible option ripe for more exploration (see Chapter 5 for more information).

Recommendations

1. A study of the different AYGS environments finds the variety of models function well in nearly all regions. Nearly a third of respondents were supportive of making all AYGS full-time, but many felt the shared-time model was best for students. This support suggests directors of shared-time AYGS may want to explore the option of expanding to a full-time schedule or adding a full-time AYGS in the region. Without changes to the AYGS funding model, the additional expenses are likely to put this option out of reach for many regions.
2. Transportation issues create problems at both shared- and full-time AYGS. While managing transportation would be an organizational task some directors would not want, there may be options for greater flexibility. VDOE may want to consider making transportation funds available to AYGS directors who would prefer options such as having their own bus. A pool of funds they could access would allow the directors to be creative in solving transportation issues.
3. There was very strong support for the prioritization of mental health and well-being of AYGS students. AYGS students face academic stressors unlike their agemates, requiring support from counselors trained in working with advanced students. All AYGS should have adequate personnel to provide for the mental health and well-being of their students.
4. Stakeholders agreed that support for culturally diverse needs should be an AYGS priority. A lack of diversity was a concern for most directors. Barriers to students of color and those from low socioeconomic backgrounds include issues of transportation, particularly when the student attends a school division far from the AYGS location. If they choose to attend, distant students lose the most instructional time when the AYGS is shared-time. Accessible full-time or residential AYGS could provide an equitable

alternative. Virtual options should be assessed to determine if they would provide an equitable and appropriate advanced education.

5. Diversity in the AYGS student population will be improved if more students from historically underrepresented backgrounds are better prepared before it is time to apply to an AYGS. This requires attention to the needs of these students throughout their K-12 education, with a particular emphasis on the early grades. Many students have the potential to succeed in AYGS, but do not have access to educational opportunities necessary to prepare them to be eligible by the time they are in high school. Revisions to the *Regulations Governing Educational Services for Gifted Students* to incorporate a talent development program will assist in providing these early educational opportunities.

Chapter 8

Leveraging Virtual Resources

The Virginia Department of Education (VDOE) has offered some form of virtual instruction since 1984, when it initiated Virginia's Electronic Classroom. With the goal of serving students who would otherwise not have access to courses because of low enrollment or a lack of qualified instructors, the program has evolved into today's Virtual Virginia (VVA; 2023a). VVA has a very specific mission:

Virtual Virginia is a program of the Virginia Department of Education that serves Virginia public schools by providing flexible options for the diverse educational needs of students and their families. As a partner of Virginia public school divisions, the VVA program offers equal access to online K–12 instruction by Virginia-certified teachers, a Statewide LMS offering digital content for teachers to use with their students in blended delivery, professional learning opportunities for educators of all levels, and a summer instructional program for K–12 learners. (VVA, 2023a)

Teachers have multiple resources through VVA, which offers numerous avenues for professional learning about virtual instruction. A network of shared open access resources is available at [#GoOpenVA](#), allowing teachers to find instructional resources or share their own materials.

Although it does not include honors or other advanced courses, VVA offers 27 Advanced Placement (AP) courses for high school students in the Commonwealth. These courses are approved by the College Board, which ensures the quality of AP courses through an audit process (College Board, 2023a). In the 2015-2016 and 2016-2017 school years, 3,377 students enrolled in VVA AP courses and completed the AP exams (Mislevy et al., 2020).

In addition to VVA, VDOE (2022a) has approved a number of *Multi-division Online Providers* (MOP). These private or non-profit providers must meet criteria specified by VDOE. For example, potential MOPs must be accredited by approved agencies, show evidence of organizational stability, and provide courses aligned to Virginia's Standards of Learning (SOL). School divisions may contract with an MOP to provide virtual courses. Students within the division may not be charged to attend MOP courses (VDOE, 2023a).

Dual enrollment, where students take classes for both high school and college credit, may be offered for students taking advanced virtual courses. These may be courses offered by the college or the high school. The [Early College Scholars](#) program allows students pursuing an Advanced Studies Diploma to receive up to 15 hours of college credit for courses taken through VVA, through an approved high school course, or through an approved course at the college. VDOE has an [agreement](#) with the Virginia Community College System for the provision of dual

enrollment credit to eligible students who complete approved courses. School divisions may approve other university courses for dual credit according to division policy or on a case-by-case basis. Dual enrollment can result in savings to students, who lessen the required coursework once they enter college. The Commonwealth can also benefit economically by avoiding duplicate effort and resources at the high school and college level.

Virtual Advanced Placement (AP) Courses

AP courses are highly regarded as rigorous, college-level courses open to any student able and motivated to engage in them. The College Board, which administers AP course curriculum and approves course design within school divisions, offers 38 AP courses in seven subject categories (College Board, 2023). Teachers or school divisions create their own syllabi to offer the curriculum provided by the College Board. At the end of each course, students have the option of taking an exam. Scores of 3, 4, or 5 on an AP exam may be accepted by colleges as evidence that the student has learned the material covered in a comparable college course and credit will be given upon admission to that college. Students can take numerous AP courses in high school, making it possible to receive credit for multiple courses upon entry to college. The savings in college tuition can be substantial. In Virginia, the state will reimburse the approximately \$100 [cost of an AP exam](#), except in the case of an AP course being taken through VVA (VDOE, 2022b). The cost savings to the Commonwealth makes AP courses an economically attractive option.

As college-level courses, AP courses are more rigorous than general education courses. High-ability students are often thankful for the challenge they offer, despite the significant workload (Foust et al., 2008; Hertberg-Davis et al., 2006). In some locations, AP courses are the only provision for advanced or HA/GT high school students. With their emphasis on the AP exam and the need to expose students to all the content that will be on the exam, there are limited opportunities for students to go in-depth on a topic of their interest during an AP course (Hertberg-Davis et al., 2006; Hertberg-Davis & Callahan, 2008). The belief that the students' performance on the AP exams is the most important outcome drives teachers' instructional decisions (Hertberg-Davis et al., 2006). To cover all the content provided by the College Board, lecture is often the most expeditious instructional method.

VVA students are not allowed to work at their own pace in courses, even when they are offered asynchronously (VVA, 2023b). One criticism of AP courses for HA/GT learners is the rigidity of their implementation, which does not allow students to work at their own pace. AP teachers rarely have time to differentiate the instruction for students who could work at a higher level or who might be struggling with the material (Dixon, 2006; Gallagher, 2009). There are likely to be multiple levels of ability, even among the high-ability students in an AP class. The need to cover so much content for the exam leaves few options for the teacher to be creative as they teach to the test, instead. In one study, prepping students to take the AP Calculus exam helped them obtain a higher score, but the long-term outcomes were more influenced by stronger

early math coursework than their AP exam preparation (Sonnert et al., 2019). Gallagher (2009) argued that AP courses and the need to have them on one's college application "diminishes opportunity for original advanced courses" (p. 287), squeezing out courses that might be of greater interest to both students and teachers. The breadth of experience that is valued in the workforce is narrowed when AP is the primary high school option for advanced learning.

Taking at least one AP course is predictive of college entrance and success (Ackerman et al., 2013; Chajewski et al., 2011). The College Board has conducted numerous studies indicating higher performance of AP students on a number of academic variables than students who did not take AP courses. Differences, however, are significantly reduced when researchers use methods that account for factors such as prior experience and demographics (Warne, 2017). A study of college undergraduates found no difference in STEM career interest between students who had taken AP mathematics courses and those who had not (Warne et al., 2019).

Web-based AP courses have become popular, particularly among rural students. In comparison with students taking AP courses in-person, these rural students were more likely to drop the course if it was online (87% retention in classroom vs. 52% in online AP courses; Barbour & Mulcahy, 2006). Among urban students taking the course, the retention rates were similar in both platforms. A study of VVA AP courses found students taking VVA AP courses in mathematics, science, or history scored lower on the AP exams than did their counterparts in the same AP courses in a face-to-face format (Mislevy et al., 2020). From the data available, it is not possible to know if these lower scores were due to differences in the virtual versus face-to-face courses or to some other variable, such as the student's reasons for taking the course or their motivational and organizational characteristics, for example. It is not likely that the students taking the VVA AP courses were less capable than their counterparts in face-to-face courses, however. The VVA AP students had higher scores on average than their face-to-face peers on the 8th grade SOL exams in mathematics, science, and English language arts (Mislevy et al., 2020). Studies such as these call into question the effectiveness of virtual AP courses. More research is needed into the factors that contribute to students' success. Some of these factors are sure to reside in the course characteristics and some will be related to the student. Potts and Potts (2017) offer a list of student characteristics needed to be successful, including strong communication and time management skills, an ability to work independently, and a desire to learn in an online environment.

Virtual Resources at AYGS

Many of the AYGS take advantage of virtual resources at times. Often, this is limited to using virtual resources to bring in a guest speaker or engage in an online activity. Students who miss a class due to an illness or an activity offered at the base school, for example, may be offered the option to make it up by doing the activity online or watching a video of the lecture. Alumni commented on the advantage of being able to see recorded lectures in such situations or when they were uncertain they understood the content. In some cases, an AYGS is able to offer

high-level courses virtually, when no qualified teacher can be found to teach it face-to-face. Some of the AYGS use virtual resources to make connections between their students at multiple sites or in different sessions for research projects or as part of their community building efforts. Blue Ridge Virginia Governor’s School (BRVGS) requires students in the third year of the program – their junior year – to take an online course from a partner college or from their own instructors. An online course is a part of each student’s schedule at Mountain Vista Governor’s School for Science, Math & Technology (MVGS). Students earn college credit through their dual enrollment option.

Courses at A. Linwood Holton Governor’s School (ALHGS) are virtual. Students are periodically brought together for joint activities, such as lab work. Located in the far southwest region of Virginia, ALHGS serves 17 school divisions and 36 high schools in one of the least populous areas in the state. Expenses for the program are kept to a minimum, as transportation and physical space are not required, and students can take the courses from any location. Students benefit from access to a variety of advanced coursework. All courses taken through ALHGS³⁶ are eligible for dual enrollment, providing students with college credit at no cost to them. The program functions like other AYGS in its selection of highly motivated, successful students by participating divisions. Students may take from one course to a full schedule of courses through ALHGS.

AYGS Objectives and Virtual Resources

AYGS were created to support the development of potential among the Commonwealth’s most talented and motivated students. Their stated purpose is not only to provide appropriate academic experiences, but also to fulfill relatedness needs (Baumeister & Leary, 1995; Deci & Ryan, 2000) among members of the AYGS community. Motivation is enhanced by social connections and AYGS builds on this psychological foundation to support their students, faculty, and regional partners in their intellectual pursuits.

Academic-Year Governor’s Schools are established through the organizational concept of creating a *Community of Learners*. Each Governor’s School provides a community of learners whereby close, trusting relationships among faculty and students give rise to a climate that stimulates growth and intellectual development. In such communities, HA/GT students can rely on a small, caring group of specially trained adults who work closely with each other to provide coordinated, meaningful, and challenging educational experiences that match the unique needs and characteristics of the HA/GT learner. A Governor’s School community of learners is created by bringing together HA/GT students, from three or more adjoining school divisions, to interact with and provide mutual support for their intellectual peers in the pursuit of academic and/or artistic growth and development commensurate with their needs and abilities. (VDOE, 1998, p. 9)

³⁶ With the exception of Latin language classes (<https://www.hgs.k12.va.us/Application.htm>)

HA/GT students are often challenged to find peers who share their interest in and passion for learning (Cross et al., 1993). Through this goal, AYGS not only offer time with a group of similarly motivated peers, but they also help to shape students' identity as members of a community of learners. This identity strengthens their motivation to pursue goals in the domains of study (Oyserman et al., 2017). There is a strong research base on the power of community to affect motivation and behavior (e.g., Oyserman et al., 2017; Wigfield et al., 2021). Students who develop this identity as a member in the community of learners are likely to persist when they face the difficult tasks that will definitely come in the pursuit of advanced education. The AYGS plants the seeds of success by emphasizing this community, ensuring their motivation to stick with the hard work essential to any occupation that requires extensive training (e.g., scientist, engineer, physician, etc.).

One advantage to virtual courses is their ability to bring students from distant locations together through technology. This may be especially helpful for HA/GT students who are infrequently in close proximity to intellectual peers. Even in a virtual course designed to have a high level of interactivity, the students wanted more engagement with their peers (Potts, 2019). While it may be possible to achieve this sense of community through virtual resources, it is quite challenging to do so. Being in the same physical space is superior to virtual platforms for building social connections (Fritz et al., 2023). With its fully virtual environment, ALHGS struggles to meet this need. In the 2022 evaluation of the school, ALHGS met or exceeded every standard, with the exception of this one: "Students develop social competence manifested in positive peer relationships and social interactions in order to form a 'community of learners'" (VDOE, 2022c). ALHGS has attempted to bring its widely distributed students together, but these efforts have been infrequent and have not reached the level of community-building activities at other in-person and hybrid AYGS. It should be noted that the director has plans to address this component of ALHGS.

On average, the strongest disagreement among our survey respondents was for the statement, "Virtual coursework is effective in fostering social interaction among students," receiving a score of less than 3³⁷ out of 7. Among the 247 open-ended comments about the use of virtual resources in AYGS, the most frequent criticisms were about the negative impact on social relationships. In interviews, directors and alumni voiced concerns about the lack of social interaction in virtual courses.

Curriculum designed for advanced learners incorporates activities that allow for in-depth exploration and creative approaches to the material (see Chapter 6 for more information). Another concern about virtual courses among directors, faculty, parents, and students was related to the curriculum and specifically to the inability to conduct hands-on activities online. Some of the schools engage in fieldwork or laboratory experiments, which is

³⁷ Mean = 2.72, Standard deviation = 1.68

not possible in a fully virtual course. Group work can happen in an online activity, but students are not able to interact physically with course materials and one another in the same way as in an in-person setting. The pandemic experience of virtual instruction was particularly detrimental for students in the performing arts. Without some form of accommodation, these limitations render virtual courses inferior to in-person options, at least in some subject areas. A fully virtual program would be hard-pressed to adequately “nurture the unique abilities and needs of gifted learners” (VDOE, 1998, p. 3).

Leveraging Virtual Resources to Expand Access to AYGS Courses

AYGS Features

In considering how the VDOE might leverage access to AYGS courses, it is important to be aware of what the AYGS offer that others might want or need to be a part of. In each region, the AYGS is different, but there are some features all share.

1. The community of learners: This includes everyone associated with the AYGS
 - a. Students, motivated to learn at an advanced level
 - b. Faculty, trained to work with advanced learners
 - c. Staff
 - d. Directors
 - e. Regional Board members
 - f. Partners in the broader community
2. Advanced curriculum
 - a. Focused on STEM, arts, government, etc. (see Appendix A)
 - b. Potential dual enrollment
3. The schedule, which varies by region
4. Participating divisions in the region

It is possible that virtual resources could access the community of learners, but to this date, this feature has not been realized in a virtual environment. The advanced curriculum could be offered virtually, but the physical limitations would need to be addressed. The schedule could present issues to incoming students. AYGS programs receive funding from the state for students from approved participating school divisions. Students outside those participating divisions would not be covered by the current AYGS funding.

AYGS courses are only one feature of this form of Governor’s School. Becoming a member of the community of learners is foundational to the concept of the AYGS, as are the regular interactions among students and faculty. Access to AYGS courses may be possible virtually, but, without these features, as one director commented, “That’s not governor’s school. That’s just virtual school.” Parents and students echoed this sentiment, as represented by the following example statements.

Governor's school classes should be in person because they're meant to be more hands on. Even though I got the learning done through virtual governor's school, I didn't bond with my classmates or do any engaging experiments or field experiences so if virtual can be avoided for governor's school, it should be. (STU230840)

Governor's School courses MUST be in-person so the student can interact with faculty and students creating a sense of community. In-person courses are vital to the success of the Governor's School program - ask any current in-person student. (PAR230488)

[My AYGS] was the only academic program that kept my child engaged consistently. We were both devastated when Covid took it away and she only got virtual instruction. [My AYGS] NEEDS to be hands-on and in person. (PAR230034)

Many students worldwide who experienced the fully online environment of the pandemic era and their families have similar attitudes about online instruction. What is unique in this situation is the intersection of these concerns and the foundational objectives of the AYGS. It is questionable whether they can be met for students accessing the program through virtual resources. Chapter 7 includes more information about the virtual environment at AYGS.

Who Needs Access?

Students who might want or need to gain access to the AYGS are 1) those who qualify but for whom there are not enough slots; 2) those who qualify but who are in non-participating school divisions; 3) those who qualify but are unable to participate due to the transportation required; 4) those who have potential, but do not qualify because of a lack of earlier preparation for advanced level courses. Students from low-income environments, African American or Hispanic backgrounds or other groups underrepresented in gifted or advanced education often have not had the preparation needed to work at an AYGS level. Others who might benefit from access to the AYGS are students who transferred from another division or state after acceptance letters were sent.

A number of school divisions have too few students working at a high level to offer advanced courses. Teacher availability can also make it impossible for a school to offer an advanced course on site. In these cases, virtual courses are a viable option.

Potential Solutions

Some of these students would be able to participate in their regional AYGS, if there were additional slots. See Chapter 5 for a proposal to allow directors to create additional slots. Students in non-participating divisions might be served by a new AYGS, if there was a champion who would create a proposal for one. It might be possible for an AYGS to work with participating divisions to address transportation issues that affect qualified students in their region. The issue of unprepared students requires VDOE to examine its practices for developing

the talent of students in underserved populations through the *Regulations Governing Educational Services for Gifted Students*. Teacher training, support programs and other options must be deliberately applied across the Commonwealth to address this issue. Several directors commented on the need for earlier preparation of the ethnically and socioeconomically diverse students who will then be eligible for the AYGS. The lack of diversity in these high school programs stems in part from unequal access to educational opportunities early in life. Virtual resources may be utilized to support young learners.

These hopeful solutions will not be possible to meet the needs of all qualified students in Virginia. For some of these students, virtual courses offered at the level of AYGS courses are a good option. VVA provides 27 AP courses in which all students in the state may participate, if the division, guidance counselor, family, and others agree. These courses can serve any students who are motivated to take on the coursework. Training of gifted resource teachers, teachers, school counselors, and principals in the availability of AP courses through VVA might increase the number of students who are recommended for the program. In addition to their ability to work at a high level, the HA/GT student characteristics required for success in a virtual program (Potts & Potts, 2017) should be incorporated into the decision to take VVA AP courses.

VVA may wish to expand their offerings of AP courses. There are AP courses available from the College Board that are currently not offered through VVA. It may be possible to offer courses that require hands-on interaction in a hybrid model, working with students' base schools or other sites across the state. Another option for increasing access to advanced courses taught at a similar advanced level as some AYGS courses could be offered through VVA. These courses should be developed and taught by teachers trained in both gifted education and virtual pedagogy. Advanced honors courses may be available through MOP's. There may be additional high-quality online providers who may be interested in pursuing VDOE's MOP option. Exploration of these options may yield greater opportunities for high-ability high school students across the Commonwealth.

Conclusion

The 19 AYGS have effectively utilized virtual resources to varying degrees, from very little use to being fully online. These choices reflect the realities of the participating divisions and the objectives of the individual AYGS. All AYGS were created to fulfill the goals of building a community of learners with educational activities appropriate to nurturing students' advanced learning. In several subject areas, these activities must happen in physical proximity. Attending AYGS courses without the possibility of becoming a full member of the AYGS community of learners would be an incomplete experience, diminishing the effects of the program. Expanding AYGS programs to serve qualified students who presently do not have access could be accomplished by adding slots or creating new AYGS. To fill the void where this is not yet possible, qualified students and families should be informed about the option to take AP courses through VVA. Other courses similar to those offered by AYGS could be provided

through VVA, under certain conditions, or contracted with MOP's. Virtual resources may be a good option for expanding educational opportunities to elementary and middle-school students in underserved communities, providing experiences to prepare them for later entry to an AYGS.

Recommendations

1. AYGS admissions are usually determined by participating school divisions. Students' motivation to participate in the AYGS is often a consideration and this is especially important for students participating in a virtual environment. Self-regulation and organizational skills may need to be a focus of instruction for even the most advanced students, although it should not detract from instruction in advanced academics.
2. To serve the many qualified Virginia students without access to an AYGS, the need for additional sites or schools should be explored. Expanded virtual options may serve these students to some degree, but they do not provide the social interactions and hands-on instructional experiences that are core to the AGYS and many stakeholders were concerned about the rigor possible in virtual courses.
3. Any virtual coursework should be designed with best practice and strong pedagogy for virtual environments. The backlash against virtual coursework resulting from experiences with emergency remote teaching during the COVID-19 pandemic will only be overcome through high-quality virtual course design that prioritizes student interactions with peers and teachers while delivering exceptional academic content.
4. Virtual Virginia's Advanced Placement courses should be better advertised to families, counselors, teachers, and administrators across the Commonwealth. Students taking these courses may need additional supports to maintain their motivation and successful self-regulation. VVA may wish to consider offering courses taught at a level similar to those at AYGS for students unable to participate in an AYGS community of learners, but these should be designed and taught by teachers with recognized expertise (i.e., certification) in working with HA/GT students and a virtual environment.

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Appendices

Appendix A: Summary of Virginia's Academic Year Governor's Schools

Appendix B: Interview Protocol

Appendix C: Survey

Appendix D: VDOE 1998 Establishing a New Academic Year Governor's School

Appendix E: VDOE 2014 Academic Year Governor's Schools Funding Formula Study

Appendix F: VDOE 2016 Academic Year Governor's Schools Funding Formula Review

Virginia's Academic-Year Governor's Schools

Counties Served



1. A. Linwood Holton Governor's School

Cities of Bristol, Galax, and Norton; and the counties of Bland, Buchanan, Carroll, Dickenson, Grayson, Highland, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise and Wythe.

2. Appomattox Regional Governor's School for Arts & Technology

Cities of Colonial Heights, Franklin, Hopewell, Petersburg, and Richmond; and the counties of Amelia, Charles City, Chesterfield, Dinwiddie, Powhatan, Prince George, Southampton, Surry, and Sussex

3. Blue Ridge Virginia Governor's School

Counties of Fluvanna, Goochland, Greene, Louisa, Madison, Nelson, and Orange

4. Central Virginia Governor's School for Science & Technology

City of Lynchburg; and the counties of Amherst, Appomattox, Bedford, and Campbell

5. Chesapeake Bay Governor's School for Marine & Environmental Science

The town of Colonial Beach; the counties of Caroline, Essex, Gloucester, King George, King & Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Richmond, and Westmoreland.

6. Commonwealth Governor's School

Counties of Caroline, King George, Spotsylvania, and Stafford

7. Governor's School for the Arts

Cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk, and Virginia Beach; and the counties of Isle of Wight and Southampton

8. Jackson River Governor's School

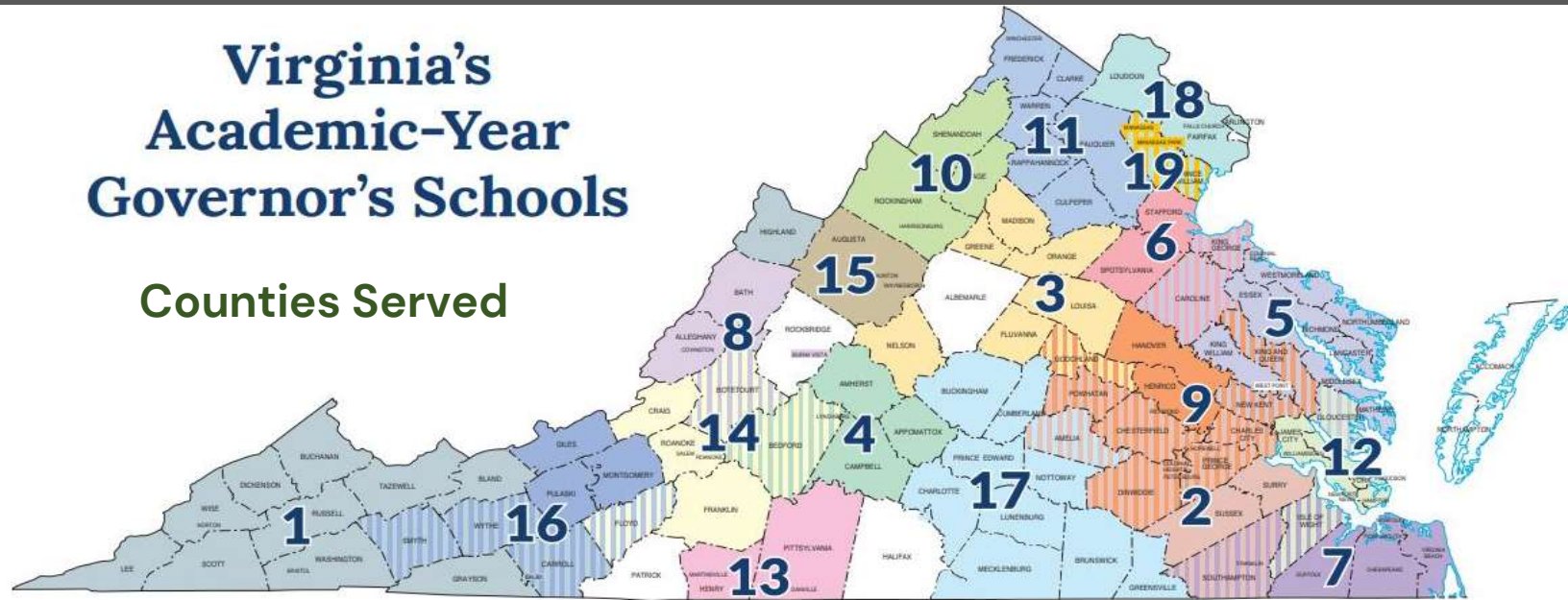
Cities of Buena Vista and Covington; and the counties of Alleghany, Bath and Botetourt

9. Maggie L. Walker Governor's School for Government & International Studies

Cities of Colonial Heights, Hopewell, Petersburg, and Richmond; and the counties of Charles City, Chesterfield, Dinwiddie, Goochland, Hanover, Henrico, King & Queen, New Kent, Powhatan, and Prince George.

Virginia's Academic-Year Governor's Schools

Counties Served



10. Massanutten Governor's School for Integrated Environmental Science & Technology

Harrisonburg and the counties of Page, Rockingham, and Shenandoah

11. Mountain Vista Governor's School

City of Winchester and the counties of Clarke, Culpeper, Fauquier, Frederick, Rappahannock, and Warren. The program operates in conjunction with Lord Fairfax Community College

12. New Horizons Governor's School for Science & Technology

Cities of Hampton, Newport News, Poquoson, and James City/Williamsburg; and the counties of Gloucester, Isle of Wight, and York

13. Piedmont Governor's School

Cities of Danville and Martinsville; and the counties of Henry and Pittsylvania.

14. Roanoke Valley Governor's School for Science & Technology

Cities of Roanoke and Salem; and the Counties of Bedford, Botetourt, Craig, Franklin, and Roanoke

15. Shenandoah Valley Governor's School

Cities of Staunton and Waynesboro, and Augusta County

16. Southwest Virginia Governor's School for Science, Mathematics & Technology

Cities of Galax and Radford; and the counties of Carroll, Floyd, Giles, Montgomery, Pulaski, Smyth, and Wythe

17. The Governor's School of Southside Virginia (GSSV)

Counties of Amelia, Brunswick, Buckingham, Charlotte, Cumberland, Greensville (includes Emporia), Lunenburg, Mecklenburg, Nottoway, and Prince Edward

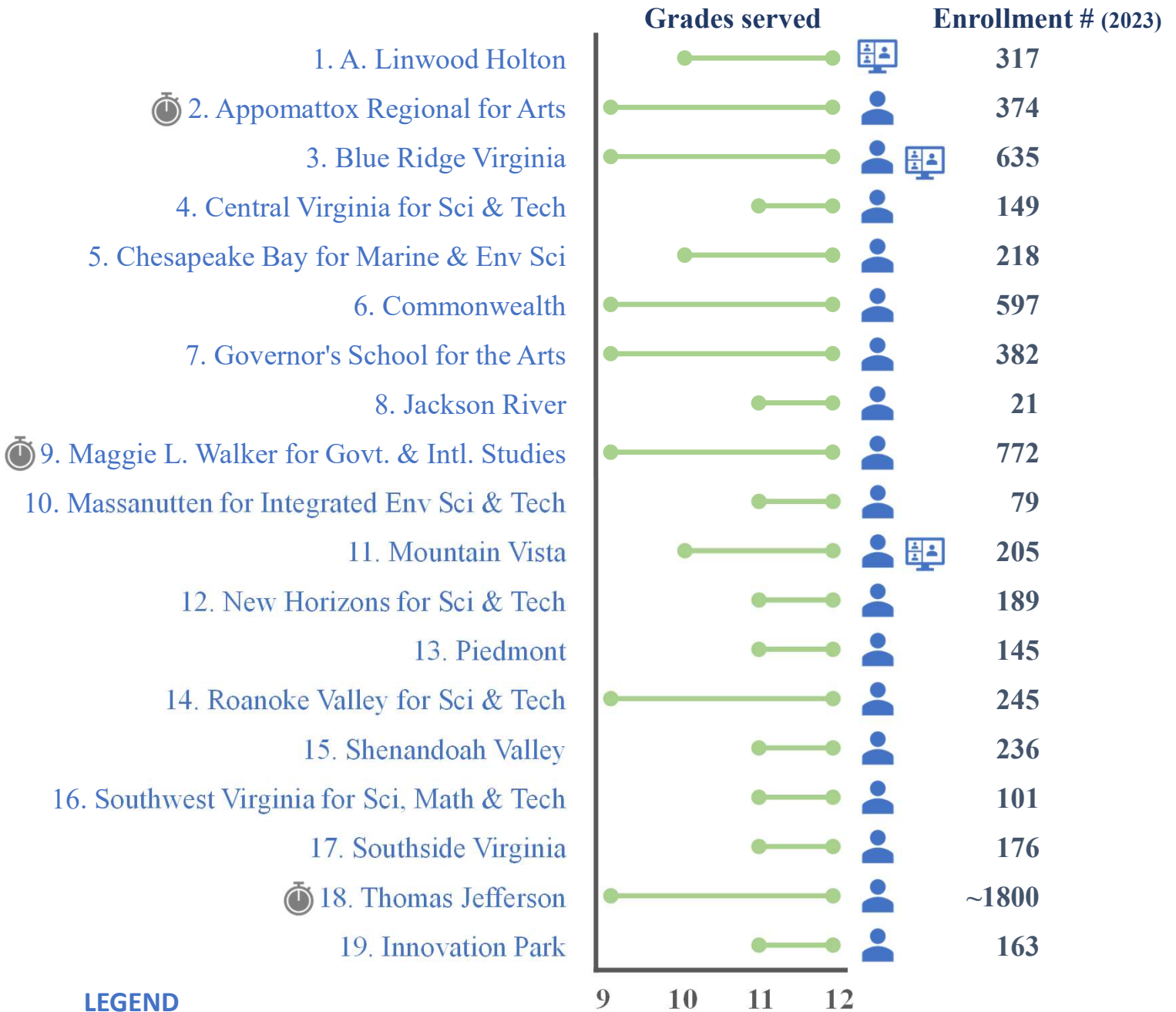
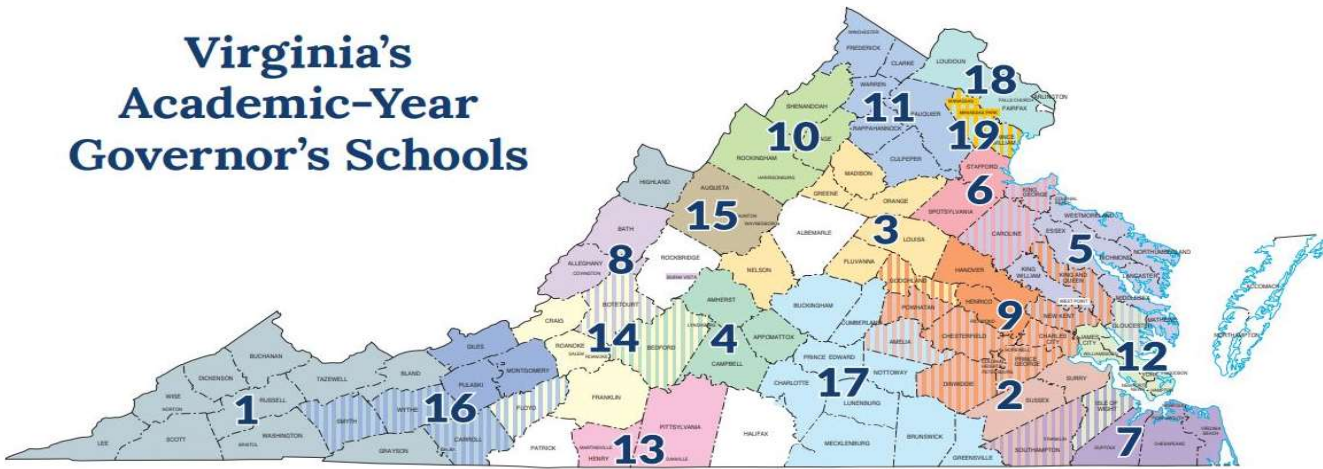
18. Thomas Jefferson High School for Science & Technology

City of Falls Church; and the counties of Arlington, Fairfax, Loudoun, and Prince William

19. The Governor's School at Innovation Park

Cities of Manassas and Manassas Park; and the county of Prince William

Virginia's Academic-Year Governor's Schools

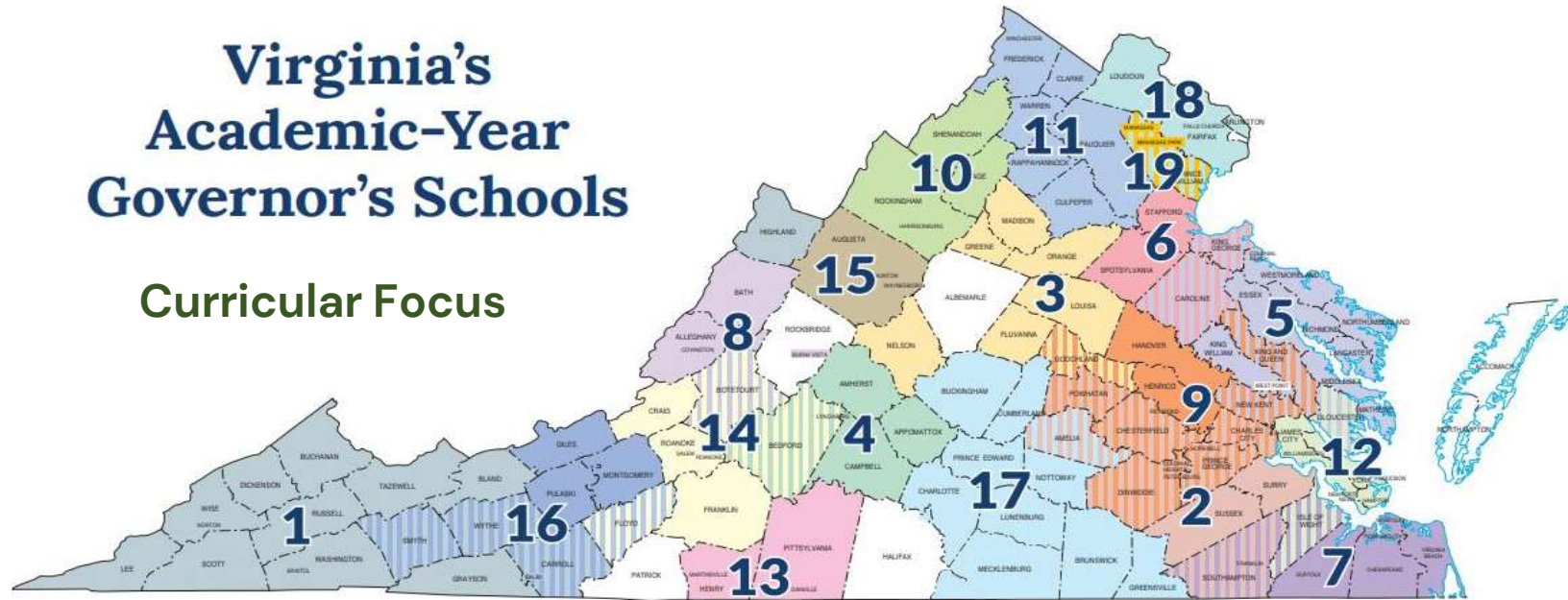


LEGEND

- In-person Sessions
- Virtual Sessions
- Fulltime School

Virginia's Academic-Year Governor's Schools

Curricular Focus



1. A. Linwood Holton Governor's School

Engineering and Computer Science; English, History, Information Technology, Life sciences, Mathematics, Natural Sciences, World languages

2. Appomattox Regional Governor's School for Arts & Technology

English; Health and PE; Math; Science; Social Sciences; World Languages; Dance; Literary Arts; Technology; Musical Arts; Visual Arts; Theatre Arts

3. Blue Ridge Virginia Governor's School

Required curriculum integrates World History I-II, AP Biology, various core classes, and a senior capstone project.

4. Central Virginia Governor's School for Science & Technology

Junior coursework: Calculus I, Math Analysis, Physics, Research. Senior coursework: Anatomy & Physiology, Physics 201 & 202, Calculus I, II & III

5. Chesapeake Bay Governor's School for Marine & Environmental Science

Integration of math, science, technology, and research, woven with marine and environmental sciences

6. Commonwealth Governor's School

Integrative curriculum in English, Mathematics, Social Studies, Science. Foreign language, Health/PE, electives, and extracurriculars at home-based school.

7. Governor's School for the Arts

Dance, Instrumental Music, Musical Theatre, Theater & Film, Visual Arts and Vocal Music

8. Jackson River Governor's School

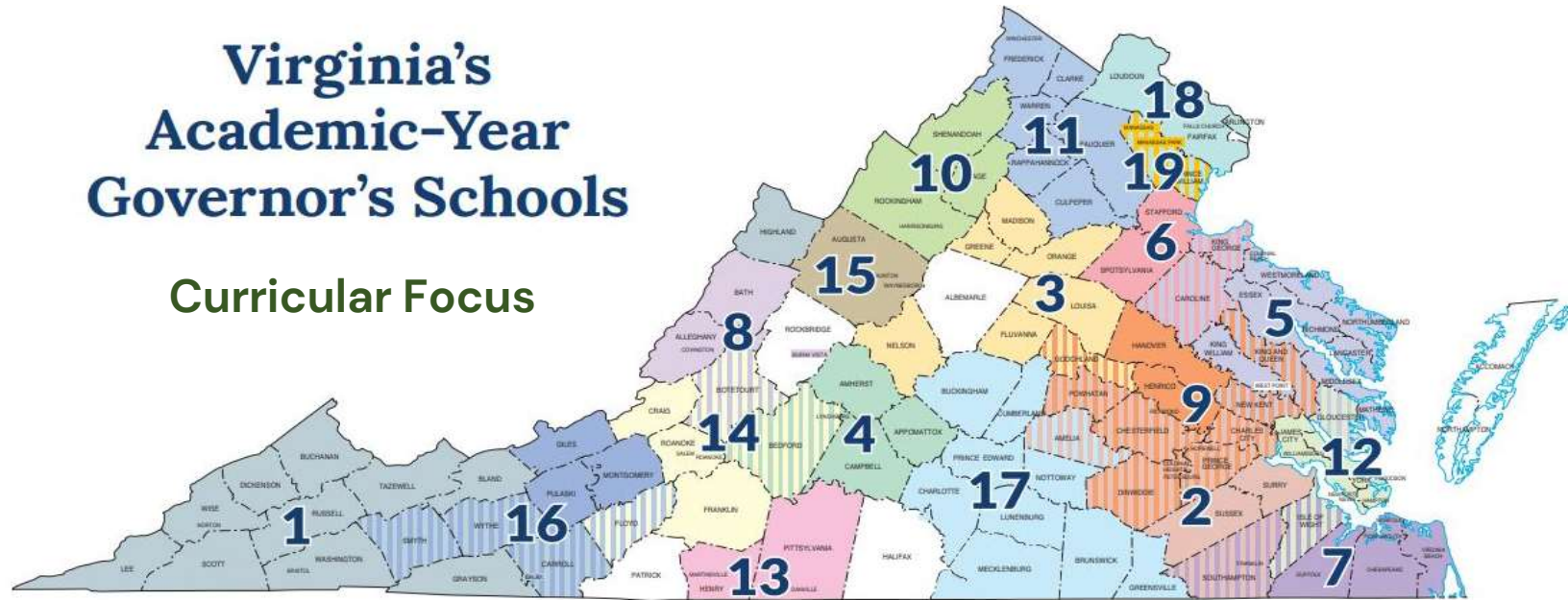
Advanced Chemistry; Biology; College Physics; University Physics; Introduction to Scientific Research; Statistics; Pre-Calculus Mathematics; Calculus; Differential Equations; Vector Calculus; Information Literacy; Computer Applications & Concepts

9. Maggie L. Walker Governor's School for Government & International Studies

Government, international studies, science, mathematics, languages, and fine arts

Virginia's Academic-Year Governor's Schools

Curricular Focus



10. Massanutten Governor's School for Integrated Environmental Science & Technology

Environmental Science,, Technology, English,, Mathematics

11. Mountain Vista Governor's School

Curriculum emphasizes Science, Mathematics, Humanities, Research, and Technology. With either Physics/Engineering focus OR Biology/Life Science focus.

12. New Horizons Governor's School for Science & Technology

Science, mathematics, technology and advanced research

13. Piedmont Governor's School

Mathematics, Science and Technology focus along with Research and English

14. Roanoke Valley Governor's School for Science & Technology

Science and Technology, along with research elective.

15. Shenandoah Valley Governor's School

Arts and humanities has the following concentrations: humanities, fine arts, or performing arts. Science has the following concentrations: mathematics, science, engineering, or technology.

16. Southwest Virginia Governor's School for Science, Mathematics & Technology

Students take math, science, technology, research, study skills, and career education classes

17. The Governor's School of Southside Virginia (GSSV)

The curriculum emphasizes math, science and technology while also requiring interdisciplinary courses like creative writing, psychology and Ethics.

18. Thomas Jefferson High School for Science & Technology

Emphasis on science and technology. All students required to take 4 English, 4 Math (not incl. Algebra I; AP Calculus is required), Biology, Chemistry, Physics, Geosystems, 4 Social Studies, 3 World Language, 2 Health/PE, 2 Arts/Sci-Tech elective/Cultural Studies, 1 Sci-Tech research, 1 Computer Science, and 1 Personal Finance.

19. The Governor's School at Innovation Park

Curriculum focuses on science, mathematics, engineering, research, and computer science. Students take social studies, language arts, electives, and extracurriculars at the home-based school.

Appendix B

Interview Protocols

AYGS Directors

- How many students does your AYGS serve? In an ideal world, how many would it be able to serve?
 - Does every student who qualifies and wants to go have access? How do you know? (need more slots?)
 - Do your students come from some places more than others? Why?
 - Is transportation an issue? How do you recruit?
- Your program is [format]. What do you think about the relative merits of full day, shared time, and virtual formats for your student population? In what ways is virtual programming promising, and what is the potential cost? Could existing virtual options be better leveraged?
- Your program focuses on [focus]. How does this choice of focus serve the region? How is that implemented? Would you change the implementation, given resources? Do you perceive a need or demand for other areas of focus?
- How does your AYGS attend to the community-building goal stated in the *Procedures for Initiating an AYGS*?
- When your program is evaluated, what are common areas of feedback? How do you respond to that feedback? Who are the stakeholders? To what degree do you believe the AYGS is supported in those stakeholder communities?
- With sufficient funding, do you perceive a need for additional AYGS programs (i.e., with different curricular foci) serving your region or the Commonwealth?
- If you could change your AYGS in any way, how would you change it?
- Who else would you recommend we talk to about the AYGS?
- What else would you like us to know about AYGS?

Alumni

- Which AYGS did you attend?
- What can you tell me about that experience? What were the best things about it? Worst?
- Did it provide a strong academic foundation? Were you better able to reach your academic or career goals because of your AYGS experience?
- Did you feel you were a part of a community of learners at the AYGS? Why or why not?
- What kind of sacrifices did you make to attend the AYGS? Were there trade-offs?
- Did you take virtual classes at the AYGS?
- Would you want the AYGS to be all virtual? Why or why not?
- Would you have wanted the AYGS to be longer? More hours each day? Or to serve you at earlier grades?

- As far as you know, was any student who should be eligible to attend the AYGS able to attend?
- Did you know about other people's opinions about the AYGS, good or bad? Can you tell me about that?
- What was transportation to school like for you? Was there a bus? How much time did you spend in transportation to get to the AYGS?
- What would you do differently, if you could change anything you wanted to about the AYGS?
- How would you describe your overall experience at the AYGS?
- Who else would you recommend we talk to about the AYGS?
- Is there anything else you would like to tell us?
- What kind of sacrifices did you make as a student at the AYGS? Were there trade-offs?

Regional AYGS Governing Board member

- To what degree, and in what ways does the AYGS meet your region's needs?
- Your regional AYGS is STEM, Perf, Intl, etc. Is this the best fit for the region?
- Does it serve your region's economy? How does it do that? (Your regional AYGS serves grades 9-12, 11-12. Is this adequate? Should there be a middle school option? Why or why not?)
- Your AYGS is **shared-time** (if so). Is this amount of time adequate for academic development? Is it adequate for the community-building goal of the AYGS?
- How does your AYGS attend to the community-building goal stated in the *Procedures for Initiating an AYGS*?
- How does the selection process for the AYGS work? Is it a fair process? Could it be improved?
- Does every student who qualifies and wants to go have access? How do you know? (need more slots?)
- Is the AYGS adequately funded? How does it compare to other schools in the region? Are there any fees associated with attending your AYGS?
- Could your region support an additional AYGS? Additional slots at existing AYGS?
- What do you think about a virtual AYGS option? Could existing virtual options be better leveraged?
- Do you hear complaints about the AYGS, whether you agree with them or not? What are they?
- If you could change the AYGS in any way, how would you change it?
- Who else would you recommend we talk to about the AYGS?
- Is there anything else you would like to tell us?

Appendix C

Surveys

VDOE AYGS Statewide Study Online Survey – **General Survey**

https://wmsas.qualtrics.com/jfe/form/SV_bCpWRn7LYz4XoKG

<https://bit.ly/AYGOVSCH>



Please select:

General AYGS Survey (applies to all AYGS) <This option

Specific AYGS Survey (choose your AYGS)

Informed consent Y/N

Have you previously taken a survey for the 2023 VDOE AYGS study? Y/N

Demographics

What is your school division? (optional) _____ (dropdown)

Please identify your primary role(s) in relation to AYGS

Student Y/N

Graduated? Y/N

Attend AYGS? Y/N

Parent Y/N

Child graduated? Y/N

Child a student at AYGS? Y/N

School administrator Y/N

At AYGS? Y/N

School faculty/staff Y/N

At AYGS? Y/N

Board member Y/N

School board member? Y/N

AYGS Regional board member? Y/N

Gifted Coordinator (Division/School?) Y/N

General Survey

Community member Y/N
Other (please write in)
Prefer not to say

Gender (optional)

Male
Female
Nonconforming
Not Listed: _____
Prefer not to say

Ethnicity (optional)

Indicate your ethnicity:

Hispanic or Latino
Not Hispanic or Latino

Indicate your race (choose as many as apply):

American Indian or Alaska Native
Asian
Black or African American
Native Hawaiian or Other Pacific Islander
White

How would you describe your community?

Rural
Small city or town
Suburb of a large city
Large city
Other

Note that this survey is anonymous. If you wish it to remain anonymous, do not disclose identifiable information in the open-ended comments.

Response options: 1-7 Strongly Disagree-Strongly Agree, Do not know=0

Access to AYGS

1. In general, Virginia's Academic Year Governor's Schools meet regional needs.
2. In terms of transportation, one of the Academic Year Governor's Schools is easily accessible to every high-ability/gifted student in their region.
3. All high-ability/gifted students in the region who could benefit from attending Academic Year Governor's Schools have access to one.

General Survey

4. High-ability/gifted students from all racial/ethnic groups have equal access to an Academic Year Governor's School in their region.
5. High-ability/gifted students who want to attend an Academic Year Governor's School are able to apply.
6. High-ability/gifted students who want to attend an Academic Year Governor's School are able to attend.
7. If you would like to share comments about access to Academic Year Governor's Schools, please enter them here: _____

Selection Process

8. Eligibility to attend Academic Year Governor's Schools is fairly determined.
9. The selection process is not a barrier to attendance for high-ability/gifted students in the region.
10. A description of the selection process for Academic Year Governor's Schools is available to the public upon request.
11. The selection process does a good job in identifying students who have an interest in the program's focus and have the prerequisites to be successful at Academic Year Governor's Schools.
12. I would like to know more about how Academic Year Governor's Schools select their students.
13. If you would like to share comments about the Academic Year Governor's Schools selection process, please enter them here: _____

Need for more AYGS

14. More students should be able to attend Academic Year Governor's Schools.
15. Younger eligible students (e.g., middle school) should have access to options like Academic Year Governor's Schools.
16. There should be additional Academic Year Governor's Schools in my region.
17. If you would like to share comments about the need for additional slots at Academic Year Governor's Schools or the need for additional schools, please enter them here: _____

Curricular focus

18. The focus of the curriculum (e.g., STEM, Performing Arts, General Advanced, etc.) at Academic Year Governor's Schools seems to be suitable for each region.
19. I would prefer a different curricular focus at the Academic Year Governor's Schools.
20. I would prefer Academic Year Governor's Schools offered multiple curricular options.
21. Some Virginia regions need additional curricular options for their high-ability/gifted students, such as Performing Arts, Arts & Humanities, STEM, Medicine, Entrepreneurial, etc.
22. If you would like to share comments about the curriculum at Academic Year Governor's Schools, please enter them here: _____

Schedule

23. Shared time (partial day) schedules are adequate to meet students' needs for advanced academic development.

General Survey

24. All Academic Year Governor's Schools should have full-time schedules.
25. If you would like to share comments about the shared/full time schedule of the AYGS, please enter them here: _____

Social/Emotional

A core purpose of the Academic Year Governor's Schools is to create a "community of learners whereby close, trusting relationships among faculty and students give rise to a climate that stimulates growth and intellectual development" (Virginia Department of Education Procedures for Initiating an Academic-Year Governor's School, 1998, p. 9) Please consider this purpose as you respond to the following items.

26. Building a sense of community among advanced learners should be a high priority for Academic Year Governor's Schools.
27. It should be a priority for Academic Year Governor's Schools to effectively support the mental health and well-being of the Commonwealth's high-ability/gifted students.
28. It should be a priority for Academic Year Governor's Schools to effectively support the culturally diverse needs of the Commonwealth's high-ability/gifted students.
29. If you would like to share comments about Academic Year Governor's Schools support for students' social and mental health and culturally diverse needs, please enter them here: _____

Virtual

Please share your beliefs about virtual educational options.

30. Virtual coursework is effective in fostering social interaction among students
31. Virtual coursework provides appropriate challenge for high ability/gifted students
32. Academic content covered in virtual courses is easier than in in-person courses
33. Academic content covered in virtual courses is more difficult than in in-person courses
34. Academic Year Governor's Schools are currently effective in utilizing virtual resources to meet students' needs.

The following items describe multiple options for virtual learning. Please rate your preference for the following options: (Rate from 1-not acceptable to 10-highly desirable)

35. What are acceptable locations for students taking virtual coursework?
 - The student's home
 - A classroom in their home school
 - A classroom in another school in the region (not home school)
 - A centralized location in the region (e.g., community college, business office)
 - Other (please write in)
36. How much virtual coursework would you prefer for students eligible for Academic Year Governor's Schools?
 - Full schedule

General Survey

- A few classes per term
- One class per term
- Occasional virtual experiences (e.g., a speaker, electronic field trip)
- No virtual coursework
- Other (please write in)

37. What platforms are acceptable for virtual learning?
- Synchronous (students and teachers are virtual at the same time)
 - Asynchronous (lessons are not live [e.g., prerecorded or no lecture] and can be taken anytime)
 - Hybrid (some coursework is real-time, some asynchronous)
 - Other (please write in)
38. How would you rank your preferences for the following Academic Year Governor's School options, with the optimal experience for high-ability/gifted students at the top (1)?
- AYGS classes full-time in person in a separate, dedicated building
 - AYGS classes full-time in person in a local school
 - AYGS classes partial day in person in a local school
 - AYGS classes full-time online in a local school
 - AYGS classes partial day online in a local school
 - AYGS classes full-time online from any location
 - AYGS classes partial day online from any location
 - *AYGS classes partial day in-person in a separate dedicated building
- *This item was not analyzed due to a technical issue.

39. If you would like to share comments about virtual options for Academic Year Governor's School programming, please enter them here: _____

Support to/for AYGS

- 40. Regional Academic Year Governor's Schools are viewed by community members as a valuable schooling option for high-ability/gifted students.
- 41. Regional Academic Year Governor's Schools adequately support students' advanced academic development.
- 42. There are enough trained teachers to provide the advanced courses to Virginia's high-ability/gifted students.
- 43. Regional Academic Year Governor's School teachers receive the training needed to support high-ability/gifted students from diverse populations (e.g., those who are racially/ethnically diverse; high ability/gifted students with other exceptionalities; high ability/gifted students from low income backgrounds; ELL high ability/gifted students)
- 44. Regional Academic Year Governor's Schools receive the resources (e.g., funding, materials, facilities, teacher training, etc.) required to provide students with the advanced courses they need.
- 45. If you would like to share comments about the level of support for Academic Year Governor's Schools, please enter them here: _____

Need for local resources

- 42. Our local schools need more resources dedicated to serving high-ability/gifted students.
- 43. I would prefer more resources be sent to local schools to provide gifted education services than to have additional Academic Year Governor's Schools.
- 44. High-ability/gifted students need more opportunities for advanced instruction at the elementary and middle school levels.
- 45. If you would like to share comments about local resources for high-ability/gifted students, please enter them here: _____

Additional Contacts

- 46. If you would like to share ideas about who else we should contact for their opinions about Academic Year Governor's Schools (share contact information if possible), please enter that information here: _____

Narrative

- 47. We would like to understand the actual experiences people have had with Academic Year Governor's Schools. If you would like to share a story of a notable Academic Year Governor's School experience, either positive or negative, please do so here: _____
- 48. Please share any other comments: _____

You may request a brief report of the survey's findings by emailing jrcross@wm.edu.

Interview

- 49. If time and resources for the project allow for interviews of survey respondents, would you be interested in participating in an interview of approximately 30 minutes? If so, **click here**. Your responses to this survey will remain anonymous.

Specific Survey

VDOE AYGS Statewide Study Online Survey – **Specific AYGS Survey**

Please select:

General AYGS Survey (applies to all AYGS)

Specific AYGS Survey (choose your AYGS) < this option

Informed consent Y/N

Have you previously taken a survey for the 2023 VDOE AYGS study? Y/N

Demographics

What is the school division you/your child is officially registered in as a student (if applicable)?
_____ (dropdown)

Please choose your **primary** AYGS (option “Do you want to enter an additional AYGS?”) <don’t include option?

- 01 - A. Linwood Holton Governor's School
- 02 - Appomattox Regional Governor's School for Arts & Technology
- 03 - Blue Ridge Virginia Governor's School
- 04 - Central Virginia Governor's School for Science & Technology
- 05 - Chesapeake Bay Governor's School for Marine & Environmental Science
- 06 - Commonwealth Governor's School
- 07 - Governor's School for the Arts
- 08 - Jackson River Governor's School
- 09 - Maggie L. Walker Governor's School for Government & International Studies
- 10 - Massanutten Governor's School for Integrated Environmental Science & Technology
- 11 - Mountain Vista Governor's School
- 12 - New Horizons Governor's School for Science & Technology
- 13 - Piedmont Governor's School
- 14 - Roanoke Valley Governor's School for Science & Technology
- 15 - Shenandoah Valley Governor's School
- 16 - Southwest Virginia Governor's School for Science, Mathematics & Technology
- 17 - The Governor's School of Southside Virginia
- 18 - Thomas Jefferson High School for Science & Technology
- 19 - The Governor's School at Innovation Park
- I do not know

Please identify your primary role(s) in relation to the AYGS

Student Y/N

Graduated? Y/N

Attend AYGS? Y/N

Parent Y/N

Child graduated? Y/N

Specific Survey

- Child a student at AYGS? Y/N
- School administrator Y/N
 - At AYGS? Y/N
- School faculty/staff Y/N
 - At AYGS? Y/N
- Board member Y/N
 - School board member? Y/N
 - AYGS Regional board member? Y/N
- Gifted Coordinator (Division/School?) Y/N
- Community member Y/N
- Other (please write in)
- Prefer not to say

Gender (optional)

- Male
- Female
- Nonconforming
- Not Listed: _____
- Prefer not to say

Ethnicity (optional)

Indicate your ethnicity:

- Hispanic or Latino
- Not Hispanic or Latino

Indicate your race (choose as many as apply):

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White

How would you describe your community?

- Rural
- Small city or town
- Suburb of a large city
- Large city
- Other

Note that this survey is anonymous. If you wish it to remain anonymous, do not disclose identifiable information in the open-ended comments.

>>AYGS<< - replaced with school name.

Response options: 1-7 Strongly Disagree-Strongly Agree, Do not know=0

Access to AYGS

1. In general, the AYGS in my region meet(s) the region's needs
2. In terms of transportation, >>AYGS name<< is easily accessible to every high-ability/gifted student in the region.
3. All high-ability/gifted students in the region who could benefit from attending >>AYGS<< have access to it.
4. High-ability/gifted students from all racial/ethnic groups have equal access to >>AYGS<<.
5. High-ability/gifted students who want to attend >>AYGS<< are able to apply.
6. High-ability/gifted students who want to attend >>AYGS<< are able to attend.
7. If you would like to share comments about access to >>AYGS<< or other AYGS in your region, please enter them here: _____

Selection Process

8. Eligibility to attend >>AYGS<< is fairly determined.
9. The selection process is not a barrier to attendance for high-ability/gifted students in the region.
10. A description of the selection process for >>AYGS<< is available to the public upon request.
11. The selection process does a good job in identifying students who have an interest in the program's focus and have the prerequisites to be successful at >>AYGS<<.
12. I would like to know more about how >>AYGS<< selects its students.
13. If you would like to share comments about the selection process, please enter them here: _____

Need for more AYGS

14. More students should be able to attend >>AYGS<<.
15. Younger eligible students should have access to options like >>AYGS<< (e.g., middle school).
16. There should be additional AYGS in my region.
17. If you would like to share comments about the need for additional slots at >>AYGS<< or the need for additional schools, please enter them here: _____

Curricular focus

18. The focus of the curriculum (e.g., STEM, Performing Arts, General Advanced, etc.) at >>AYGS<< seems to be suitable for the region.
19. I would prefer a different curricular focus at >>AYGS<<.
20. I would prefer >>AYGS<< offered multiple curricular options
21. My region needs additional curricular options for its high-ability/gifted students, such as Performing Arts, Arts & Humanities, STEM, Medicine, Entrepreneurial, etc.

Specific Survey

22. If you would like to share comments about the curriculum at >>AYGS<<, please enter them here: _____

Schedule

23. Shared time (partial day) schedules are adequate to meet students' needs for advanced academic development.
24. All Academic Year Governor's Schools should have full-time schedules.
25. If you would like to share comments about the shared/full time schedule of Academic Year Governor's Schools, please enter them here: _____

Social/Emotional

A core purpose of the Academic Year Governor's Schools is to create a "community of learners whereby close, trusting relationships among faculty and students give rise to a climate that stimulates growth and intellectual development" (Virginia Department of Education Procedures for Initiating an Academic-Year Governor's School, 1998, p. 9)

Please consider this purpose as you respond to the following items.

26. Building a sense of community among advanced learners is a high priority for >>AYGS<<
27. Building a sense of community among advanced learners should be a high priority for >>AYGS<<.
28. >>AYGS<< effectively supports the mental health and well-being of the region's high-ability/gifted students.
29. >>AYGS<< effectively supports the culturally diverse needs of the region's high-ability/gifted students.
30. It should be a priority for >>AYGS<< to effectively support the mental health and well-being of the region's high-ability/gifted students.
31. It should be a priority for >>AYGS<< to effectively support the culturally diverse needs of the region's high-ability/gifted students.
32. If you would like to share comments about >>AYGS<< support for students' social and mental health and culturally diverse needs, please enter them here: _____

Virtual

33. Virtual coursework is effective in fostering social interaction among students
34. Virtual coursework provides appropriate challenge for high-ability/gifted students
35. Academic content covered in virtual courses is easier than in in-person courses
36. Academic content covered in virtual courses is more difficult than in in-person courses
37. >> AYGS<< is currently effective in utilizing virtual resources to meet students' needs.

The following items describe multiple options for virtual learning. Please rate your preference for the following options: (Rate from 1-not acceptable to 10-highly desirable)

1. What are acceptable locations for students taking virtual coursework?
- The student's home
 - A classroom in their home school
 - A classroom in another school in the region (not home school)

Specific Survey

A centralized location in the region (e.g., community college, business office)
Other (please write in)

2. How much virtual coursework would you prefer for students eligible for Academic Year Governor's Schools?
Full schedule
A few classes per term
One class per term
Occasional virtual experiences (e.g., a speaker, electronic field trip)
No virtual coursework
Other (please write in)
3. What platforms are acceptable for virtual learning?
Synchronous (students and teachers are virtual at the same time)
Asynchronous (lessons are not live [e.g., prerecorded or no lecture] and can be taken anytime)
Hybrid (some coursework is real-time, some asynchronous)
Other (please write in)
4. How would you rank your preferences for the following Academic Year Governor's School options, with the optimal experience for high-ability/gifted students at the top (1)?
AYGS classes full-time in person in a separate, dedicated building
AYGS classes full-time in person in a local school
AYGS classes partial day in person in a local school
AYGS classes full-time online in a local school
AYGS classes partial day online in a local school
AYGS classes full-time online from any location
AYGS classes partial day online from any location
*AYGS classes partial day in-person in a separate dedicated building
*This item was not analyzed due to a technical issue.

38. If you would like to share comments about virtual options for AYGS programming, please enter them here: _____

Support for AYGS

39. >> AYGS<< is viewed by community members as a valuable schooling option for high-ability/gifted students.
40. >> AYGS<< adequately supports high-ability/gifted students' advanced academic development.
41. There are enough trained teachers to provide the advanced courses our region needs.
42. >> AYGS<< teachers receive the training needed to support high-ability/gifted students from diverse populations (e.g., those who are racially/ethnically diverse; high-ability/gifted students with other exceptionalities; high-ability/gifted students from low income backgrounds; ELL high-ability/gifted students)

Specific Survey

43. >> AYGS<< receives the resources (e.g., funding, materials, facilities, teacher training, etc.) required to provide students the advanced courses they need.
44. If you would like to share comments about the level of support for >>AYGS<<, please enter them here: _____

Need for local resources

45. High-ability/gifted students need more opportunities for advanced instruction at elementary and middle school.
46. Our local schools need more resources dedicated to serving high-ability/gifted students.
47. I would prefer more resources be sent to local schools to provide gifted education services than to have additional Academic Year Governor's Schools.
48. If you would like to share comments about local resources for high-ability/gifted students, please enter them here: _____

Additional Contacts

49. If you would like to share ideas about who else we should contact for their opinions about Academic Year Governor's Schools, please enter that information here (share contact information if possible): _____

Narrative

50. We would like to understand the actual experiences people have had with Academic Year Governor's Schools. If you would like to share a story of a notable Academic Year Governor's School experience, either positive or negative, please do so here. _____
51. Please share any other comments: _____

You may request a brief report of the survey's findings by emailing jrcross@wm.edu.

Interview

52. If time and resources for the project allow for interviews of survey respondents, would you be interested in participating in an interview of approximately 30 minutes? If so, **click here**. Your responses to this survey will remain anonymous.

Appendix D

VDOE Procedure for Initiating a New Academic Year Governor's School

Winter, 1998

Virginia Department of Education Procedures for Initiating An Academic-Year Governor's School

Developing and implementing the program and administrative arrangements for an Academic-Year Governor's School involves extensive planning and discussions among the participating school divisions. It is recommended that these take place over the course of six to twelve months. The procedure includes the following steps:

1. School divisions desiring to implement an Academic-Year Governor's School shall provide the Department of Education with documentation of the following:
 - The existence of an active, on-going Governor's School Planning Committee of superintendents or their designees from the participating school divisions. The committee should also include some school board members and parents. The planning committee shall design a Governor's School program, which is beyond the scope and sequence of the regular schools' program for gifted students, and shall determine the initial location and fiscal agent.
 - A statement, which demonstrates the need/rationale for the school. This statement should be concise and state the important reasons to have a Governor's School, separate and unique from the existing program offerings for secondary gifted students. A statement of assurance that all school divisions in the region have been invited to participate.
 - A brief description of the proposed program, including site location, number of students, grade levels, and general curriculum design.
 - A written memorandum of agreement with local businesses, industries, and institutions of higher learning. This agreement will suggest ways in which community resources will contribute to the Governor's School to broaden the scope of the students' educational experiences.
 - A statement of assurance that the Governor's School Planning Committee has reviewed provisions of the *Administrative Procedures Guide for the Establishment of Academic-Year Governor's Schools* and agrees to follow the guidelines set forth in the document.
2. A statement of assurance that an on-going Governing Board will be established to reflect current Board of Education regulations relative to jointly operated schools and programs.
3. A statement of assurance that all divisions listed in the proposal, at the time it is approved by the Board of Education, intend to participate for a minimum of three years in the program.
4. The Department of Education will review the proposal and documentation and make a report to the Board of Education with a recommendation.

5. The Board of Education will determine if the proposed program is approved as a joint school (Section 22.1-26 of the Code of Virginia), and is to be recommended to the Governor to be designated, with appropriate funding, as a Governor's School.
6. The Department of Education may issue a contract involving the fiscal agent, the Governing Board, and the Department of Education.
7. The Department of Education will assist the planning committee in developing the Administrative Procedures and will evaluate the program on a regular basis.

OUTLINE OF ADMINISTRATIVE PROCEDURES

INTRODUCTION

DEPARTMENT OF EDUCATION ROLE

PROGRAM DESCRIPTION

ADMINISTRATIVE PROCEDURES

DEPARTMENT OF EDUCATION EVALUATION PROCEDURES

Revised January 8, 1998

ADMINISTRATIVE PROCEDURES GUIDE FOR THE ESTABLISHMENT OF ACADEMIC-YEAR GOVERNOR'S SCHOOLS

Introduction

The Academic-Year Governor's School Programs shall provide educational options not available in home schools for students identified as gifted or eligible to be so designated. These programs will provide students with the following opportunities:

- to develop their own separate identity as a community of learners,
- to learn and grow in an environment that nurtures the unique abilities and needs of gifted learners,
- to develop a positive and realistic concept of self and others,
- to belong to a community of learners who share interests and abilities,
- to learn about subjects of interest to them,
- to be risk-takers and decision-makers in a non-threatening environment,
- to provide career exploration and/or advanced classes which may help students as they prepare for college or other post-secondary opportunities, and
- to expand their knowledge of and interest in science and technology, the humanities, and the arts by providing interaction with community, industry, professionals, and higher education.

The Role of the Department of Education

The Department of Education will act as a resource for these programs, providing training and technical assistance, including program and curriculum design, instructional strategies, and evaluation. The Department also will provide guidelines for program implementation, issue the agreement between participants, and approve program plans annually. In addition, it will establish the criteria for and conduct an external evaluation of each program at least once every six years.

Program Description

- I. Each Regional Governor's School planning committee appointed by the Governing Board shall develop cooperatively with local school divisions, and have available for review and dissemination, a program description that includes the following:
 - A. Statement of program goals

B. Statement of program objectives

C. Course descriptions

- If college credit is to be awarded, courses selected should be carefully scrutinized to assess the likelihood of acceptance of credit by recognized two- and four-year institutions. If a new course description is needed, it should be prepared and submitted through the appropriate college channels for approval.
- If an academic credit is awarded, appropriate criteria for passing the course must be specified.

D. Description of relationship between Regional Governor's School programs and local plans for the education of the gifted

- Local gifted coordinators should actively participate in program planning and implementation and work with the program director.

E. Length of program and daily schedule

- Upon approval of program design, a detailed schedule of classes, activities, and assignment of personnel must be developed.

F. Facilities to be provided to accomplish program goals and objectives

- Assurance from the fiscal agent that permanent facilities are available, are supportive of the need for a separate identity as a Governor's School, and are adequate to meet the needs of the program.

G. Materials and equipment to be provided to accomplish program goals and objectives

H. Internal program evaluation procedures including the following:

- What is to be evaluated.
- What process will be used, and
- How data will be used for program improvement.

I. Program administration

Assurance from the Governing Board that the Governor's School program, consistent with Department of Education Administrative Procedures, will be administered by the program director with approval by the Governing Board.

Administrative Procedures

- II. Each regional Governor's School director will maintain, for review and dissemination, procedures developed cooperatively with participating school divisions which address the following topics:
- A. Student recruitment, selection, and admissions criteria; including a statement that ensures that all eligible gifted students, including underachievers and/or culturally disadvantaged, have an equal opportunity to apply;
 - Students' abilities and interests shall be consistent with program offerings.
 - B. Code of student conduct and attendance
 - C. Transportation arrangements which are in compliance with all applicable federal and state regulations
 - D. Staff recruitment, selection, and assignment
 - The Governor's School shall hire a qualified director and staff with training and/or experience in gifted education and have their vitae on file.
 - To the extent possible, staff should be balanced as to race and gender and hired from participating school divisions.
 - E. Staff development
 - The program will provide appropriate staff training in addition to staff planning time.
 - When any staff person(s), including a college or university instructor, is (are) employed without training or successful experience in gifted education, instructional supervision shall be provided to ensure the use of proper instructional strategies and techniques for gifted learners.
 - F. Staff evaluation
 - The director should complete an evaluation report based on personal observations of each instructor. Instruments and procedures for evaluation shall be identified as part of staff development training and shall be a part of any workshop training.
 - G. Parent/community involvement
 - In addition to opening/closing day ceremonies, parents should be considered as program resources, perhaps as mentors, or as resources for other activities which complement the educational experience. A PTA/PTO should be established and

meetings should be held at least four times each academic year.

- H. Business, industry, higher education, and arts involvement
- I. Documentation that insurance and other fiscal information will be provided

Department of Education Evaluation Procedures

- III. The Department of Education will conduct periodically, at least once every six years, an evaluation of each Governor's School program. A Governor's School proposal must include a statement of assurance that the Governor's School Director will work with the Department of Education to conduct an evaluation that includes the following:
 - A. Examination of the program's policies, procedures, and outcomes
 - B. Use of criteria addressing program design, delivery of instruction, and evaluation of the program
 - C. Interviews with program directors, staff, students, and parents
 - D. Review of documents
 - E. Observations
 - F. Follow up

Revised Winter 1995

Cooperative Agreement Contract

Concerning the Establishment and Operation of

the _____ Governor's School
between _____ School Board
and The Governing Board of the _____ Governor's School and the
Virginia Department of Education.

Whereas, the _____ has requested that the Board of Education designate _____ High School as a Governor's School;

Whereas, the Board of Education has designated _____ as the Governor's School for
_____.

Whereas, the Department of Education requires that the fiscal agent for the Governor's School abide by the regulations set forth in the Administrative Procedures Guide for Establishing a Governor's School;

Whereas, the Department of Education requires that the fiscal agent provide facilities to the Department of Education, the Governor's School, and the participating school divisions.

THE PARTIES HEREBY AGREE AS FOLLOWS:

1. That _____ Governor's School is an institution of the Virginia Department of Education, with _____ Schools serving as Fiscal Agent.
2. The Governing Board shall be established and maintained as required by Board of Education regulations on jointly operated schools and programs. [§22,1-26]
3. The Governing Board shall be responsible for and shall abide by procedures and regulations consistent with the Department of Education's *Administrative Procedures and Guidelines*. The Governing Board shall call and conduct meetings as it deems appropriate.
4. The Governing Board shall serve as an Advisory Board to the _____ School Board on all matters related to fiscal responsibility.
5. The _____ School Board shall be responsible for and abide by Department of Education policies and guidelines regarding fiscal responsibility.
6. The _____ School Board and the Governing Board shall abide by the specifications set forth in the proposal to the Board of Education and the guidelines from the Department of Education regarding the establishment, purpose, and administration of the _____ Governor's School.
7. Schools, serving as fiscal agent, shall provide permanent facilities that are adequate to meet the needs of the program.

8. Transportation of students is the responsibility of the participating school division.
9. This Cooperative Agreement is effective from the date of execution
this _____ day of _____, 199_.

Signature School Board Chair

Signature Governor's School Governing Board
Chair

Print Name

Print Name

Signature Division Superintendent

Signature Superintendent of Public Instruction

Print Name

Print Name

Academic-Year Governor's Schools

The Department of Education sponsors regional Governor's Schools, which serve gifted high school students during the academic year. These schools create special educational opportunities for gifted students in science, mathematics, technology, social sciences, the humanities, and the arts. Students at each of these schools concentrate on their specific areas of interest while obtaining well-balanced instruction in other areas of study, either through the Governor's School or at their base school.

Academic-Year Governor's Schools are established through the organizational concept of creating a *Community of Learners*. Each Governor's School provides a community of learners whereby close, trusting relationships among faculty and students give rise to a climate that stimulates growth and intellectual development. In such communities, gifted students can rely on a small, caring group of specially trained adults who work closely with each other to provide coordinated, meaningful, and challenging educational experiences that match the unique needs and characteristics of the gifted learner. A Governor's School community of learners is created by bringing together gifted students, from three or more adjoining school divisions, to interact with and provide mutual support for their intellectual peers in the pursuit of academic and/or artistic growth and development commensurate with their needs and abilities.

Students use computers and other current technology in laboratory activities, conduct in-depth research, work with other students to develop special projects and performances, and work alongside mentors in business, industry, government, and universities gaining career experiences.

Each academic-year school has its own admissions process. For more information, contact the local director of the Governor's School in your area, or the local gifted program administrator in your school division. In addition, information may be obtained from the Department of Education.

References

Carnegie Council on Adolescent Development, (1989, June). Turning Points: Preparing American Youth for the 21st Century. Washington, DC: USDOE.

Virginia Governor's Schools. (1995). Richmond, VA: Virginia Department of Education

SECRETARY OF EDUCATION

REPORT

**ACADEMIC-YEAR
GOVERNOR'S SCHOOLS
FUNDING FORMULA STUDY**

OCTOBER 1, 2014 (REVISED)

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I. OVERVIEW OF STUDY REQUIREMENTS

- The General Assembly required in the *2014 Appropriation Act* that the Secretary of Education conduct a study of the formula used to determine governor's school funding (Item 127, Paragraph E., *2014 Appropriation Act*):

E. The Secretary of Education, with the support of the Department of Education, shall conduct a study of the formula used to determine governor's school payments by October 1, 2014, and submit it to the Chairmen of House Appropriations and Senate Finance Committees. The study shall include, but not be limited to, consideration of the length of the program, appropriate state and local shares, and the academic model used by governor's schools in the configuration of the funding formula.

II. OVERVIEW OF ACADEMIC-YEAR GOVERNOR'S SCHOOLS

- The Academic-Year Governor's Schools originated to offer educational services to gifted students in the areas of the arts, economics, government, humanities, international studies, mathematics, science, and/or technology that could not be provided through the gifted education programs in the students' local high schools. Through "communities of learners," students in these programs experience an environment where individual abilities and interests are not restricted by age-level considerations, and where their emotional needs are recognized and addressed through appropriate strategies. The programs must demonstrate that they incorporate the following opportunities for those who attend:
 - To develop their own separate identity as a community of learners;
 - To learn and grow in an environment that nurtures the unique abilities and needs of gifted learners;
 - To develop a positive and realistic concept of self and others;
 - To belong to a community of learners who share interests and abilities;
 - To learn about subjects of interest to them;
 - To be risk takers and decision makers in a non-threatening environment;
 - To provide career exploration and/or advanced classes that may help students as they prepare for college or other postsecondary opportunities; and

- To expand their knowledge of and interest in science and technology, the humanities, and the arts by providing interaction with the community, industry, professionals, and higher education.
- The Virginia Department of Education (VDOE) administers funds that are appropriated by the General Assembly for Governor’s Schools.
- The Department of Education maintains a Web site that contains information related to the Academic-Year Governor’s School Programs.
http://www.doe.virginia.gov/instruction/governors_school_programs/academic_year/index.shtml
- The first four Governor’s Schools opened in September 1985. Those schools, with their initial enrollment, participating school divisions, and locations are indicated in Table 1.

TABLE 1: Original Academic-Year Governor’s Schools (1985)

SCHOOL NAME	INITIAL ENROLLMENT	PARTICIPATING DIVISIONS	LOCATION (FISCAL AGENT)
Central Virginia Governor’s School	48 (ninth graders only)	Amherst County, Appomattox County, Bedford County, Campbell County, Lynchburg City	Heritage High School (Lynchburg City)
New Horizons Governor’s School	95	Hampton City, Poquoson City, Newport News City, Williamsburg-James City County, York County	New Horizons Regional Education Center (Hampton City)
Roanoke Valley Governor’s School	200	Botetourt County, Franklin County, Roanoke County, Roanoke City, Salem City	Patrick Henry High School (Roanoke City)
Thomas Jefferson High School for Science and Technology	393	Falls Church City, Manassas City, Manassas Park City, Fairfax County, Loudoun County, Prince William County	Thomas Jefferson High School (Fairfax County)
Total	736	21 localities	

- Currently, 19 Academic-Year Governor’s Schools serve 6,548 high school students from 122 school divisions. Information about the 2013-2014 Academic-Year Governor’s Schools can be found in Appendix A. In 2013-2014, students from twenty-one (21) school divisions had access to more than one Academic-Year Governor’s School. A map of the sites and participating school divisions operating in 2013-2014 is provided as Appendix B.
- Each Academic-Year Governor’s School is governed by a regional board comprised of at least one school board representative from each of the participating school divisions in accordance with the *Regulations Governing Jointly Owned and Operated Schools and Jointly Operated Programs [8VAC20-281-20]*. The regional governing board is charged with developing policies for the school including the school’s admission process, budget and local tuition contribution, and curricu-

lum. Governor's Schools are unique in their focus area, selection of students, funding scenario, and curriculum in order to best serve their regional constituency.

- Each school is funded in part by the state and by participating local school divisions.

III. FUNDING HISTORY OF ACADEMIC-YEAR GOVERNOR'S SCHOOLS

- FY 2013 state funding = \$12.0 million
FY 2014 state funding = \$12.3 million
FY 2015 state funding = \$13.4 million
- State funding for the Academic-Year Governor's Schools (AYGS) is provided to the fiscal agents of each program based on a funding formula using the certified number of students enrolled from each division and the funded per pupil amount. The state payment allocated to each participating division is adjusted for the division's composite index. Funding is further adjusted based on the portion of the day the program is in operation. Schools receive funds allocated in Item 136, Paragraph C. 28.a (*2014 Appropriation Act*). The *2014 Appropriation Act* states that:
 - a. *Out of the amounts for Governor's School Payments, the Department of Education shall provide assistance for the state share of the incremental cost of regular school year Governor's Schools based on each participating locality's composite index of local ability-to-pay. Participating school divisions must certify that no tuition is assessed to students for participation in this program.*
- AYGS students are included in the average daily membership (ADM) of their home school division. ADM enrollment is the basis for all state per pupil funding (such as Basic Aid funding under the Standards of Quality) received by school divisions. The *2014 Appropriation Act*, (Item 136, Paragraph C.28.f.1) includes language from earlier biennia stating that "*local school divisions are encouraged to provide the appropriate portion of basic aid per pupil funding to the Governor's Schools for students attending these programs, adjusted for costs incurred by the school division for transportation, administration, and any portion of the day that the student does not attend a Governor's School.*" In the *2013 Appropriation Act*, the program membership cap for funding was increased from 1,700 to 1,725 students beginning in FY 2014:

Regular school year Governor's Schools are funded through this Item based on the state's share of the incremental per pupil cost for providing such programs for each

student attending a Governor's School up to a cap of 1,650 students per Governor's School in the first year and a cap of ~~1,700~~ 1,725 students per Governor's School in the second year. This incremental per pupil payment shall be adjusted for the composite index of the school division that counts such students attending an Academic Year Governor's School in their March 31 Average Daily Membership...

- Table 2 depicts the historical per pupil amount in the state AYGS funding formula.

TABLE 2: Academic-Year Governor's Schools Historical Per Pupil Amount in the State Funding Formula

FISCAL YEAR	GOVERNOR'S SCHOOLS PER PUPIL AMOUNT*
1987	\$1,000
1988	1,000
1989	2,250
1990	2,250
1991	2,593
1992 -1998	2,765
1999	2,900
2000	2,900
2001	3,185
2002	3,185
2003	3,410
2004	3,412
2005	3,541
2006	3,543
2007	3,933
2008	3,933
2009	4,479
2010	4,479
2011	4,327
2012	4,327
2013	4,368
2014	4,369
2015	4,624

* These are the total per pupil amounts that apply only to the Academic-Year Governor's Schools. Governor's School per pupil funding amounts are increased or decreased at the same percentage that Basic Aid per pupil amounts are adjusted for each state biennial budget. All per pupil figures reflect the total per pupil funding before application of the composite index of local ability-to-pay for student share of funding and the program classification weight (i.e., 1 for full-time; 1/2 or 5/6 for shared-time programs).

- The 2012 General Assembly appropriated funds to encourage part-day programs to offer a full-day course of study to each of its students, and if possible, to expand to grades 9 through 12. Specifically, a \$100,000 appropriation for FY 2013 provided planning grants for one or more existing part-day Academic-Year Governor's Schools to expand to full-day programs, including the possibility of merging with another Governor's School.
 - The grant was awarded to Southwest Virginia Governor's School for Science, Mathematics, and Technology (SWVGS) located in Pulaski. The current program serves students in grades 11 and 12 for a portion of the day.
 - An additional appropriation of \$100,000 was awarded in FY 2014 to support start-up of an expanded program for Southwest Virginia Governor's School expansion. A full-time program at SWVGS is anticipated to be operational in the 2015-2016 school year.
- The 2012 General Assembly appropriated one-time funds in FY 2013 to provide a planning grant of \$100,000 for a new full-day regional science and technology Governor's School serving grades 9 through 12 in the greater Hampton Roads area.
 - The grant was awarded jointly to Norfolk Public Schools and Portsmouth Public Schools to conduct their planning prior to June 30, 2013, and present a full proposal to the Virginia Board of Education for first review no later than September 2013, with final review and approval in October 2013.
 - The participating school divisions would then seek operational funding from the General Assembly during the 2015 session, with the Governor's School anticipated to be fully operational for the 2015-2016 school year.

IV. ACADEMIC-YEAR GOVERNOR'S SCHOOLS: CURRENT FUNDING STRUCTURE

- Overview of revenues and expenditures of Academic Year Governor's Schools
 - In FY 2013, the per pupil expenditure for regular day operation for the 19 Governor's Schools overall, based on student enrollment adjusted for program length, was \$8,730 (source of regular day operation cost data: Table 13, FY 2013 Superintendent's Annual Report).
 - Based on revenues reported on the FY 2013 Annual School Reports submitted by the 19 Academic Year Governor's Schools, across all programs, 26.4 percent of revenues were from state sources and 73.6 percent of revenues

- were from local and other sources. The percentage of revenues from state sources ranged from 13.6 percent to 99.7 percent across the programs, and the percentage of revenues from local and other sources ranged from 0.3 percent to 86.4 percent. The total cost of each Governor's School program and the composite index of the school divisions participating in each program impact the portion of revenues from state compared to local and other sources.
- In FY 2013, the percentage of Academic Year Governor's Schools expenditures for instruction was 92.3 percent (source: Table 13, FY 2013 Superintendent's Annual Report). While Governor's Schools' FY 2013 expenditures contain some non-instructional costs, school divisions participating in the Governor's Schools may make non-instructional expenditures on behalf of the Governor's Schools, with these costs included in the expenditures of the participating school divisions and not in the expenditures of the Governor's Schools themselves.
- AYGS vary by program length. There are three Program Length Classifications: 1) shared-time program (multiplier of 1/2); 2) shared-time program (multiplier of 5/6), and 3) full-time program (multiplier of 1). Instructional hours under the 5/6 Program Length Classification include classroom time and additional hours outside of class to meet course requirements. These classifications serve as general guidelines for the Board of Education's program approvals as follows:
- Schools classified as full-time (1) enroll students for at least 27.5 instructional hours per week and receive funding for each student served using the multiplier of 1.
 - Schools classified as shared-time (5/6) enroll students for greater than 13.75 and less than 27.5 instructional hours per week and receive funding for each student served using the multiplier of 5/6.
 - Schools classified as shared-time (1/2) typically enroll two groups of students, each for at least 13.75 (27.5 x 1/2) instructional hours per week. These schools enroll one group in the morning and another group in the afternoon and receive funding for each student served using the multiplier of 1/2.

- The current state funding formula has been in existence since the beginning of Academic-Year Governor’s Schools programs in 1985.

$$\# \text{ enrolled } \times (\text{program length classification}) = \# \text{ of students (value must be rounded up or down)}$$

$$\# \text{ of students } \times (1 - \text{composite index}) \times \text{total per pupil amount} = \text{state entitlement received}$$

- The current formula contains the following components for determining each AYGS state entitlement (state funding amount):
 - The first component determines the weighted number of students by school division:

(number of students enrolled by division) x (Program Length Classification) = weighted number of students by division (value must be rounded up or down)
 - The second component determines the state AYGS entitlement by division:

(weighted number of students by division) x (per pupil amount[†]) x (1 – composite index) = state AYGS entitlement amount by division
- [†] from Table 2
- An example of AYGS funding formula outcomes for a shared-time program (5/6) can be seen in Table 3.

Table 3: Central Virginia Governor’s School FY 2015 Projected Funding

CENTRAL VIRGINIA GS - Continuous						
115	LYNCHBURG		Approved Program Classification:	5/6		
Code	Divisions	FY 2015 Composite Index	Projected FY 2015 Fall Semester Enrollment	Students x Program Length Classification (5/6)	Calculated FY 2015 Fall Semes- ter Enrollment	Total FY 2015 Entitlement
005	AMHERST	0.3079	14.00	(11.666)	12.00	38,403.00
006	APPOMATTOX	0.3080	4.00	(3.333)	3.00	9,599.00
010	BEDFORD COUNTY	0.3132	40.00	(33.333)	33.00	104,800.00
016	CAMPBELL	0.2760	28.00	(23.333)	23.00	76,999.00
115	LYNCHBURG	0.3680	34.00	(28.333)	28.00	81,826.00
260	Total		120.00		99.00	311,627.00

- The individual Governor’s School Regional Governing Board makes all budgetary decisions for each program, such as the establishment of the local share of the cost that is paid by the participating school divisions. Public school divisions must certify annually that no tuition is charged to students or their parents.

V. STAKEHOLDER INPUT

- Input shared by stakeholders regarding AYGS funding issues:
 - The initial AYGS state per pupil funding amount (\$1,000) was arbitrarily determined. While state per pupil funding is now associated with the increase or decrease of basic aid, the AYGS state per pupil amount has not been studied to determine if it accurately represents a reasonable per pupil funding amount (current per pupil funding for AYGS is \$4,624, while per pupil funding for the Virginia Preschool Initiative is \$6,000) or adequately funds the cost of operation.
 - Since the local per student tuition contributions are consistent regardless of division composite index, it is advantageous for AYGS to have more students from divisions with a lower composite index (and thus a greater state funding level). However, divisions with a lower composite index tend to minimize participation.
 - Fluctuating enrollment levels from school divisions impact local appropriations to AYGS, making year-to-year AYGS budgeting very challenging when local school divisions reduce AYGS enrollment as a cost-cutting strategy.
 - Dual enrollment partnerships often provide more funding to Community Colleges via college Average Daily Membership (ADM) appropriation than Governor's schools receive through AYGS entitlement.
 - AYGS programs do not have access to categorical funds, such as Virginia Retirement System (VRS) supplements, textbook funds, health care premiums, and teacher salary increases.
 - Governor's schools have been encouraged to provide full-day instruction by *2014 Appropriation Act* language, yet increased enrollment, not increased instructional program length, is the primary driver of increased state appropriation under the current funding formula.
 - The values used in the current formula to classify programs according to program length effectively cause AYGS programs not to be able to "count" every student.
 - Calculated values are rounded, which may reduce student numbers in the formula to a lower number than actual students served and reduce overall funding (see example Table 3 on page 7).

- The pupil-based funding cap (1,725 students) prevents any program that exceeds the cap from receiving funding for every attending student.
- The current funding formula does not consider resources necessary to support shared-time and full-time programs.
 - Research programs, internships, and other specialized opportunities are costly components of AYGS programs not typically provided in a stand-alone public high school.
 - Full-time AYGS offer activities (such as athletics) typically provided in a stand-alone public high school.
 - Several AYGS programs must support transportation costs to and from their programs.
 - Most AYGS programs have facility costs, such as electricity and other utility bills, as part of their operating expenses.
 - Shared-time programs pay building expenses for a full day even though funding supports only a portion of the day.
- Non-instructional personnel are typically not funded in most AYGS, yet services (such as academic guidance) are still provided, often by instructional staff.
- Funding suggestions from stakeholders:
 - Review the state per pupil funding amount to determine the appropriate level of funding (perhaps based on a staffing funding model).
 - Address the reduction in the number of students due to rounding as reflected within the current formula to ensure that the number of students funded reflects actual enrollment numbers.
 - Remove the pupil-based funding cap so that all attending students are supported by state funding.
 - Consider incorporation of a stipend instead of a program classifier in the funding formula.
 - Provide direct access for AYGS to categorical funding appropriations for school divisions (e.g., VRS supplements, textbook funds, health care premiums, and teacher salary increases).

- Make AYGS eligible for expanded supplemental grants under Direct Aid public budget similar to school divisions.
- Provide a minimum maintenance of effort requirement and/or incentives for local school divisions to maintain local tuition contributions when state appropriation increases.
- Provide a hold harmless clause so that funding formula changes do not lead to funding loss for some programs.
- Cap the composite index in re-formulating the Governor's School entitlement at 0.5, similar to other funding formulas, such as the Virginia Pre-school Initiative formula.
- Consider elimination of the composite index from the current funding formula.
- Consider a funding model based upon either the number of courses taken, credits earned by students, or staffing of AYGS programs.
- Seek legislative change to make education tax credits allowable for public school foundations and/or Governor's schools (many AYGS do not have nonprofit foundations).

VI. ALTERNATIVE STATE FUNDING FORMULA OPTIONS

- This section presents various options as alternatives to the current AYGS state funding formula. The first several options present different approaches to establishing a funded per pupil amount for the formula, compared to the historical practice of updating the per pupil amount for each state biennial budget for the rate of change in the Basic Aid per pupil amount. The current per pupil funding amount is not based on any specific staffing or cost standard. Due to the scope and time limitations of this study, these options are presented as conceptual models. More detailed analysis is required beyond the scope of this study to determine the fiscal and distributional impacts of these options.

Proposed AYGS State Funding Formula Options:

1. Base the total per pupil funding amount in the AYGS formula on the Basic Aid per pupil amount of the student's home school division. Basic Aid funding supports the required instructional staffing costs under the Standards of Quality (SOQ) as well as recognized support costs of the K-12 education program in school divisions. For FY15, the average division total Basic Aid

- per pupil funding amount is approximately \$5,600. Optionally, the per pupil amount for SOQ Gifted Education for the student's school division could be added to the total per pupil funding amount to recognize gifted staffing costs as determined through the SOQ formula. In FY15, the average division total Gifted Education per pupil funding amount is \$47. The state funds provided would be adjusted for the existing program classification weight and composite index as is currently done.
2. Apply the Basic Aid school-level instructional staffing standards to enrollment for each AYGS to generate the cost of funded instructional positions and convert that cost to a total per pupil cost. This standard is a schoolwide pupil-teacher ratio of 21 to 1, plus staffing for principal, assistant principal, librarian, and guidance counselor positions. Optionally, apply the SOQ Gifted Education staffing standard of one position per 1,000 students for additional per pupil funding. To recognize support costs, add an average per pupil amount calculated for Basic Aid support costs. The state funds provided would be adjusted for the existing program classification weight and composite index as is currently done.
 3. Base the total per pupil funding amount in the formula on a specific AYGS instructional staffing standard, similar to the model used for the state Regional Alternative Education Programs funding formula. (The Regional Alternative Education Program formula applies a 10 to 1 pupil-teacher ratio standard to a base 50-student program enrollment, and then adds funds for a program director position and various support positions needed to staff alternative education programs. The total cost is converted to a per pupil cost for use in the program funding formula to provide funds for each student in enrollment.) One suggested standard for gifted programs such as the AYGS is a 15 to 1 pupil-teacher ratio. Since the 15 to 1 ratio would cover classroom teachers only, the model would need to reflect administrative and support position costs in the per pupil amount. Optionally, non-personnel support costs, such as instructional supplies, could be added. The existing per pupil amount for Basic Aid support costs could be used to capture support costs in lieu of establishing a specific support standard.
 4. For options 1-3 above, require a minimum local share of funding based on the composite index of each school division to be incorporated into the formula to provide both a state and minimum local share of funding. Localities could choose to provide additional funds above the local minimum. If this approach were to provide increased funding overall, to offset the increased state costs, consideration could be given to not counting (or prorating)

- AYGS students in the ADM of their home division. AYGS students would not drive other state funding through ADM, but this option would increase the overall amount of AYGS funding currently provided.
5. Cap the Composite Index at 0.5000 for purpose of the AYGS formula so that the state funds a minimum 50 percent state share (as is done with the Summer Governor's Schools programs and the Virginia Preschool Initiative funding). While this approach would provide additional state support for AYGS, it would only impact programs and participating divisions where the division composite index is greater than 0.5000.
 6. Allow "rounding up" to the next whole student where application in the formula of the shared-time Program Classification Weights ($1/2$ or $5/6$) to AYGS student enrollment results in the "loss" of a student due to rounding down to the nearest whole student. Rounding up would recognize that the student slot affected by rounding must be accounted for as a full student in program operation. Another option in the formula is to recognize each AYGS student served by removing the current enrollment cap of 1,725.
 7. Include AYGS programs in certain state Direct Aid funding streams that school divisions receive related to compensation or other operational support. Examples include funding for VRS contributions; textbooks; employee health care premiums; teacher salary increases; and state hold harmless payments (when funded). Alternatively, state appropriation act language could require that a prorated portion of such funds must be passed through from the participating school divisions to the AYGS based on the average daily membership of students attending AYGS. Or, the existing appropriation act language in which school divisions are encouraged to pass through a portion of per pupil Basic Aid funding to AYGS could become a requirement.
 8. Provide a base per pupil amount for all AYGS programs, and a per course or per instructional hour add-on to better reflect the larger volume of course offerings or increased credit hours offered by longer programs.
 9. Adjust the Program Length Classification weight applied to full-time AYGS programs so that the weight used for full-time programs is more consistent with the value of the weight for shared-time programs that use a weight of $5/6$ for an instructional day. Hold $1/2$ and $5/6$ shared-time program funding harmless. Approaches such as the " $9/6$ " weight for full-time

programs proposed at the 2014 General Assembly session could be considered.

VII. CONCLUSIONS

- The current state AYGS funding formula is not based on any specific staffing or cost standard that relates to best practice or actual costs of the programs. Consequently, the current formula does not adequately reflect the actual costs of operation and the programmatic and staffing needs of the programs. In addition, the AYGS, particularly the self-contained, full-time programs, provide many of the programs, functions, and staffing present in comprehensive high schools, but also various specialized course offerings and enrichment activities adding to their cost. AYGS are not directly included in certain state Direct Aid funding streams that support significant K-12 operational costs such as VRS, health care premiums, teacher pay increases, and textbooks.
- Current state funding for AYGS supports just over 25 percent of the operational costs of the programs overall, while state support for public schools generally is significantly higher at over 40 percent. In addition, the funded per pupil amount in the state AYGS funding formula (\$4,624 for FY15) is approximately 53 percent of the average operational cost for AYGS of \$8,730, but actual state funding support is only a portion of the \$4,624 per pupil amount after the composite index is applied for funding. Certain state programs receive per pupil support at higher amounts than does the AYGS program.

VIII. RECOMMENDATIONS

- The various state AYGS funding formula options presented in Section VI. should be studied further for technical feasibility as a funding model for AYGS, for fiscal impact to the state and localities, and for distributional impact on individual programs and participating school divisions.
- As budgetary conditions and priorities allow, the Governor and General Assembly may consider adopting an alternative state AYGS funding formula that better reflects the costs and operations of these programs, as well as provide increased state funding for AYGS given current levels of state support relative to the costs of operating these specialized programs and the level of state support provided for other Direct Aid programs and public schools in general.

- ❑ Optionally, consideration could be given to directly including AYGS in certain state Direct Aid funding streams to support significant operational costs of the programs as discussed in Section VI.
- ❑ In the event an increased state investment is made in funding AYGS, to ensure overall funding support increases, consideration could be given to adopting a local funding maintenance of effort requirement or local funding supplanting prohibition.

Appendix A: 2013-2014 Academic-Year Governor’s Schools Information

NAME (Fiscal Agent) (Program Classification)	FOCUS	GRADES	ACTUAL ENROLLMENT 2013-2014	PARTICIPATING DIVISIONS IN 2013-2014
A. Linwood Holton Governor’s School (Washington County) (Shared-time 5/6)	Core Academics And Engineering	11 – 12	380	Bristol City, Galax City, Norton City, and the counties of Bland, Buchanan, Carroll, Dickenson, Grayson, Highland, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise and Wythe
Appomattox Regional Governor’s School (Chesterfield County) (Full-time)	Visual and Performing Arts and Technology	9 – 12	361	Colonial Heights City, Franklin City, Hopewell City, Petersburg City, Richmond City, and the counties of Amelia, Charles City, Chesterfield, Dinwiddie, Powhatan, Prince George, Southampton, Surry and Sussex
Blue Ridge Governor’s School (Fluvanna County) (Shared-time 1/2)	Science, Mathematics, and Technology	11 – 12	429	Counties of Fluvanna, Goochland, Greene, Louisa, Madison, Nelson and Orange
Central Virginia Governor’s School (Lynchburg City) (Shared-time 5/6)	Science, Mathematics, and Technology	11 – 12	123	Lynchburg City, and the counties of Amherst, Appomattox, Bedford and Campbell
Chesapeake Bay Governor’s School (Essex County) (Shared-time 5/6)	Marine and Environmental Science	10 – 12	265	Counties of Caroline, Colonial Beach, Essex, Gloucester, King George, King & Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Richmond and Westmoreland
Commonwealth Governor’s School (Spotsylvania County) (Shared-time 1/2)	Core Academics	9 – 12	584	Counties of Caroline, King George, Spotsylvania, and Stafford
Governor’s School for the Arts (Norfolk City) (Full-time*)	Visual and Performing Arts	9 – 12	355	Chesapeake City, Franklin City, Norfolk City, Portsmouth City, Suffolk City, Virginia Beach City, and the counties of Isle of Wight and Southampton
Governor’s School of Southside Virginia (Charlotte County) (Shared-time 5/6)	Humanities or Science, Technology, Engineering, and Mathematics	11 – 12	186	Counties of Amelia, Brunswick, Buckingham, Charlotte, Cumberland, Greensville, Lunenburg, Mecklenburg, Nottoway and Prince Edward

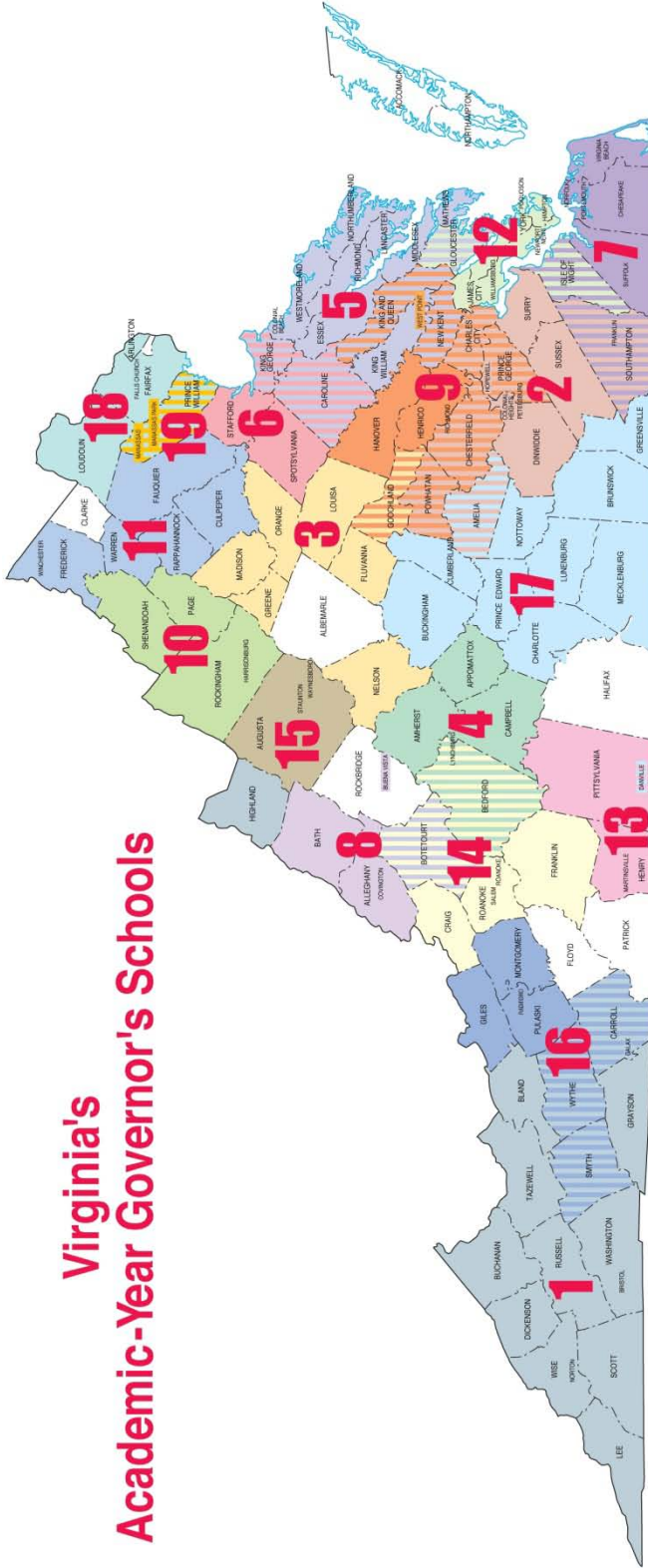
SECRETARY OF EDUCATION

NAME (Fiscal Agent) (Program Classification)	FOCUS	GRADES	ACTUAL ENROLLMENT 2013-2014	PARTICIPATING DIVISIONS IN 2013-2014
Governor's School at Innovation Park (Prince William County) (Shared-time 5/6)	Science, Technology, Engineering, and Mathematics	11 – 12	110	Manassas City, Manassas Park City, and Prince William County
Jackson River Governor's School (Alleghany County) (Shared-time 1/2)	Science, Mathematics, and Technology	11 – 12	38	Buena Vista City, Covington City, and the counties of Alleghany, Bath and Botetourt
Maggie L. Walker Governor's School for Government and International Studies (Richmond City) (Full-time)	Government and International Studies	9 – 12	726	Petersburg City, Richmond City, the counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, King & Queen, New Kent, Powhatan, Prince George, and the Township of West Point
Massanutten Regional Governor's School (Shenandoah County) (Shared-time 5/6)	Environmental Studies and Integrated Technology	11 – 12	76	Harrisonburg City and the counties of Page, Rockingham and Shenandoah
Mountain Vista Governor's School (Fauquier County) (Shared-time 5/6)	Science, Mathematics, and Technology	11 – 12	130	Winchester City and the counties of Culpeper, Fauquier, Frederick, Rappahannock and Warren
New Horizons Governor's School (Hampton City) (Shared-time 5/6)	Science, Technology, Engineering, and Mathematics	11 – 12	170	Hampton City, Newport News City, Poquoson City, James City County/Williamsburg and the counties of Gloucester, Isle of Wight and York
Piedmont Governor's School (Henry County) (Shared-time 5/6)	Science, Mathematics, and Technology	11 – 12	149	Danville City, Martinsville City, and the counties of Henry and Pittsylvania
Roanoke Valley Governor's School (Roanoke City) (Shared-time 1/2)	Science, Mathematics, and Technology	9 – 12	267	Roanoke City, Salem City, and the counties of Bedford, Botetourt, Craig, Franklin and Roanoke
Shenandoah Valley Governor's School (Augusta County) (Shared-time 5/6)	Arts and Humanities or Science, Technology, Engineering, and Mathematics	11 – 12	223	Staunton City, Waynesboro City, and Augusta County
Southwest Virginia Governor's School (Pulaski County) (Shared-time 5/6)	Science, Mathematics, and Technology	11 – 12	139	Galax City and the counties of Carroll, Giles, Montgomery, Pulaski, Smyth and Wythe
Thomas Jefferson High School for Science and Technology (Fairfax County) (Full-time)	Science, Mathematics, and Technology	9 – 12	1,837	Falls Church City and the counties of Arlington, Fairfax, Loudoun and Prince William
Total			6,548	

*The Governor's School for the Arts (GSA) was approved as full-time for the purpose of funding. To meet program goals, students are required to participate in after school and weekend hours for rehearsals and performances. Therefore, GSA students average 6 hours per week day of instruction.

Appendix B: 2013-2014 Map of Academic-Year Governor's Schools

Virginia's Academic-Year Governor's Schools



- 1** A. Linwood Holton Governor's School
- 2** Appomattox Regional Governor's School for Arts and Technology
- 3** Blue Ridge Governor's School
- 4** Central Virginia Governor's School for Science and Technology
- 5** Chesapeake Bay Governor's School for Marine and Environmental Science
- 6** Commonwealth Governor's School
- 7** Governor's School for the Arts
- 8** Jackson River Governor's School
- 9** Maggie L. Walker Governor's School for Government and International Studies
- 10** Massanutten Governor's School for Integrated Environmental Science and Technology
- 11** Mountain Vista Governor's School
- 12** New Horizons Governor's School for Science and Technology
- 13** Piedmont Governor's School
- 14** Roanoke Valley Governor's School for Science and Technology
- 15** Shenandoah Valley Governor's School
- 16** Southwest Virginia Governor's School for Science, Mathematics, and Technology
- 17** The Governor's School of Southside Virginia
- 18** Thomas Jefferson High School for Science and Technology
- 19** The Governor's School at Innovation Park

Stripes indicate participation in two regional programs.



VIRGINIA DEPARTMENT OF EDUCATION

REPORT

Review of Academic-Year Governor's Schools Program Funding Formula

**Report to the Chairmen of the House
Appropriations and Senate Finance
Committees**

November 4, 2016

History and Overview of Virginia's Academic-Year Governor's Schools

Academic-Year Governor's Schools (AYGS) originated in the Commonwealth in 1985 to offer gifted students academic and visual and performing arts opportunities beyond those normally available in the students' home schools. Through these schools, students are able to focus on a specific area of intellectual or artistic strength and interest, and study in a way that best suits the gifted learner's needs. Each program stresses non-traditional teaching and learning techniques to expand students' knowledge of and interest in science and technology, the humanities, and the arts by providing interaction with the community, industry, professionals, and higher education. Career exploration and advanced classes help students prepare for college and other postsecondary opportunities.

The programs have grown over the years, and various Governor's Schools models have been created. Currently, 19 Academic-Year Governor's Schools serve 6,670 high school students from 126 school divisions.

Each Academic-Year Governor's School is governed by a regional board comprised of at least one school board representative from each of the participating school divisions in accordance with the *Regulations Governing Jointly Owned and Operated Programs [8VAC20-281-20]*. The regional governing board is charged with developing policies for the school including the school's admission process, budget and local tuition contribution, and curriculum. Governor's Schools are unique in their focus area, selection of students, funding scenario, and curriculum in order to best serve their regional constituency.

Funding History of Academic-Year Governor's Schools

Funding of the Governor's Schools is a shared responsibility between the state and participating local school divisions. The Department of Education administers state Direct Aid funds appropriated by the General Assembly to the fiscal agents of each program based on a funding formula using the certified number of students enrolled from each division and the funded per pupil amount.

The initial per pupil funding amount for AYGS programs was \$1,000, and grew sporadically in ensuing years. For approximately the first 15 years of the AYGS program, the funded per pupil amount was not routinely adjusted on an annual basis. Subsequently, the funded per pupil amount was updated each biennium based on the percentage rate of change in the Standards of Quality (SOQ) Basic Aid per pupil amount resulting from the biennial "rebenchmarking" process.

The state payment allocated to each participating division is adjusted for the division's composite index. State funding is further adjusted based on the portion of the day the program is in operation (i.e., Program Classification), based on weights of 0.50 (half-day program), $5/6^{\text{th}}$ ($5/6^{\text{th}}$ -day program), and 1.0 (full-day program). Schools receive funds

allocated in Item 139, Paragraph C.28. of the *2016 Appropriation Act*. Item 139, Paragraph C.28.a. states that:

“Out of the amounts for Governor's School Payments, the Department of Education shall provide assistance for the state share of the incremental cost of regular school year Governor's Schools based on each participating locality's composite index of local ability-to-pay. Participating school divisions must certify that no tuition is assessed to students for participation in this program.”

AYGS students are included in the average daily membership (ADM) of their home school division. ADM enrollment is the basis for all state per pupil funding (such as Basic Aid funding under the Standards of Quality) received by school divisions. The *2016 Appropriation Act* (Item 139, Paragraph C.28.f.1) states that:

“...local school divisions are encouraged to provide the appropriate portion of the basic aid per pupil funding to the Governor's Schools for students attending these programs, adjusted for costs incurred by the school division for transportation, administration, and any portion of the day that the student does not attend a Governor's School.”

Recent state funding for AYGS programs has increased alongside per pupil funding:

Total State AYGS Funding	AYGS Funding Formula Per Pupil Amount
FY 2013 = \$12.0 million	FY 2013 = \$4,368
FY 2014 = \$12.3 million	FY 2014 = \$4,368
FY 2015 = \$13.2 million	FY 2015 = \$4,624
FY 2016 = \$13.5 million	FY 2016 = \$4,697
FY 2017 = \$15.9 million	FY 2017 = \$5,053 (note: includes the Compensation Supplement but not the \$50 per course/per student funding which varies by program)

Recent Study Requirements and Funding Actions Impacting AYGS Programs

In 2014, the General Assembly required the Secretary of Education to conduct a study of the formula used to determine Governor’s Schools funding (*Item 127, Paragraph E., 2014 Appropriation Act*). This study contains a detailed history of state funding for Governor’s Schools and presents various options for potential funding formula changes.

As a result of that study, in December 2015, the Governor proposed a new funding formula in the 2016-2018 biennial budget, as introduced, which provided 1) a base per pupil amount for support costs based on most support funding components provided in Standards of Quality Basic Aid funding, and 2) instructional staffing funding based on the SOQ Basic Aid instructional staffing standards that apply to high schools. Support costs include salary and non-salary items such as substitutes, school nurses, other support salaries, and non-personnel

expenditures (i.e., material and supplies, utilities, etc.). Instructional staffing includes classroom teachers, principal, assistant principal(s), guidance counselor(s) and librarian(s).

Under the Governor's proposal, a single support per pupil amount of \$2,099 (based on the average prevailing support funding per pupil used in the Basic Aid formula) funded non-instructional support salary and non-salary cost items. A separate per pupil amount was generated for each AYGS program to provide funding for instructional staffing costs. The instructional staffing funding provided was based on the SOQ staffing standards for non-teaching instructional positions (i.e., principal, assistant principal(s), school counselor(s), and librarian(s)) and the 21:1 school-wide ratio for secondary classroom teachers. This resulted in varying per pupil funding across programs since the SOQ instructional standards can generate a varying number of positions and costs when applied to each program's student enrollment. The funding formula proposed by the Governor provided an increase in state funding for AYGS programs compared to the existing formula used in fiscal year 2016.

The final action taken by the 2016 General Assembly on the AYGS funding formula for the 2016-2018 budget provided for the state's share of a 2.50 percent increase in the rebenchmarked per pupil funding amount and the state's share of \$50 per course per student in enrollment. This formula provided an increase in state funding for AYGS programs compared to the existing formula used in fiscal year 2016. The General Assembly also included budget language stating this formula is effective only for fiscal years 2017 and 2018. Additionally, the 2016 General Assembly increased the enrollment cap per AYGS program used for funding from 1,725 to 1,800 students beginning in fiscal year 2017.

Finally, the 2016 action included appropriation act language directing the Department of Education to review and submit findings on the distribution methodology used to determine Governor's Schools tuition payments. It states:

“The Department of Education shall review the distribution methodology used to determine the Governor's School tuition payments by November 4, 2016, and submit the findings of the review to the Chairmen of House Appropriations and Senate Finance Committees. The review shall include, but not limited to, consideration of the length of the academic program day with the intent to determine and provide an equitable distribution of tuition payments based on the actual length of academic program day, the appropriate state and local shares, and the academic model used by governor's schools in the configuration of the funding formula.”

Review of AYGS Program Revenues and Expenditures from Fiscal Year 2016

Table 1 below lists the revenues and expenditures reported by AYGS programs on the fiscal year 2016 Annual School Report submitted to the Department of Education. In total, over \$50.0 million in revenues and expenditures were reported for fiscal year 2016. While most expenditures were for operational costs (salaries and fringe benefits, utilities, materials-supplies, etc.), approximately \$720,000 was reported in capital expenditures. The two

dedicated sources of state funding for AYGS programs are the AYGS formula funding and the Virginia Public School Authority Educational Technology Grants that are provided to AYGS programs. These two state revenue sources totaled \$13.9 million in fiscal year 2016, and accounted for 27.6 percent of all revenues reported. Local tuition payments from participating school divisions was the largest revenue source at \$24.7 million (or 48.9 percent), while “other/miscellaneous” revenue was \$11.8 million (or 23.4 percent). Other/miscellaneous revenue is mainly comprised of student fees and refunds-rebates (note: this category also includes local operating funds provided directly by Fairfax County for the AYGS program at Thomas Jefferson High School).

In fiscal year 2016, non-state sources of revenue covered the majority of operating costs for AYGS programs; state funds support a smaller portion of costs for AYGS programs than they do for other public schools; this is particularly the case for full-day programs.

Table 1. Fiscal Year 2016 Revenues and Expenditures for Academic-Year Governor’s Schools Programs as Reported on the Annual School Report

Governor’s School	Revenues				Expenditures		
	State (AYGS Formula & VPSA Ed. Tech. Grants)	Local Tuition from Divisions	Other/Misc.	Total ³	Operating	Capital	Total
CENTRAL VIRGINIA GOVERNOR’S SCHOOL FOR SCIENCE/TECHNOLOGY	\$340,290	\$564,000	\$132,498	\$1,036,788	\$936,336	\$157,578	\$1,093,914
SOUTHWEST VIRGINIA GOVERNOR’S SCHOOL	\$387,734	\$442,750	\$12,932	\$843,416	\$855,043	\$0	\$855,043
GOVERNOR’S SCHOOL FOR THE ARTS	\$1,127,888	\$1,538,925	\$0	\$2,666,813	\$2,547,627	\$26,466	\$2,574,093
ROANOKE VALLEY GOVERNOR’S SCHOOL	\$434,403	\$1,255,500	\$0	\$1,689,903	\$1,610,941	\$69,256	\$1,680,197
NEW HORIZONS GOVERNOR’S SCHOOL	\$427,755	\$820,961	\$16,252	\$1,264,968	\$1,213,042	\$13,827	\$1,226,869
SHENANDOAH VALLEY GOVERNOR’S SCHOOL	\$575,575	\$749,414	\$134,437	\$1,459,426	\$1,366,450	\$0	\$1,366,450
GOVERNOR’S SCHOOL OF SOUTHSIDE VIRGINIA	\$589,397	\$422,061	\$1,346	\$1,012,804	\$919,160	\$7,355	\$926,516
APPOMATTOX REGIONAL GOVERNOR’S SCHOOL	\$1,172,806	\$2,505,720	\$7,464	\$3,685,990	\$3,620,354	\$31,966	\$3,652,320
A. LINWOOD HOLTON GOVERNOR’S SCHOOL	\$518,900	\$102,000	\$241,640	\$862,540	\$965,155	\$41,133	\$1,006,288
CHESAPEAKE BAY GOVERNOR’S SCHOOL	\$539,101	\$965,732	\$38,025	\$1,542,858	\$1,466,296	\$73,997	\$1,540,293
COMMONWEALTH GOVERNOR’S SCHOOL	\$906,632	\$2,474,361	\$0	\$3,380,993	\$3,380,993	\$0	\$3,380,993
MAGGIE L. WALKER GOVERNOR’S SCHOOL ¹	\$2,046,275	\$5,396,566	\$33,896	\$7,476,737	\$7,229,147	\$161,750	\$7,390,897
THOMAS JEFFERSON HIGH SCHOOL-FAIRFAX CO. ²	\$2,788,040	\$4,991,357	\$11,040,366	\$18,819,763	\$18,815,188	\$4,575	\$18,819,763
BLUE RIDGE GOVERNOR’S SCHOOL	\$607,891	\$0	\$3,877	\$611,768	\$597,084	\$25,540	\$622,624
JACKSON RIVER GOVERNOR’S SCHOOL	\$88,093	\$76,443	\$15,000	\$179,536	\$162,156	\$0	\$162,156

Governor's School	Revenues				Expenditures		
	State (AYGS Formula & VPSA Ed. Tech. Grants)	Local Tuition from Divisions	Other/Misc.	Total³	Operating	Capital	Total
MASSANUTTEN GOVERNOR'S SCHOOL	\$217,680	\$321,999	\$100,142	\$639,820	\$658,292	\$65,813	\$724,105
PIEDMONT GOVERNOR'S SCHOOL FOR MATH/SCL/TECH.	\$501,236	\$452,922	\$33,513	\$987,671	\$925,949	\$40,354	\$966,304
MOUNTAIN VISTA GOVERNOR'S SCHOOL	\$372,100	\$826,929	\$3,500	\$1,202,529	\$1,144,349	\$0	\$1,144,349
THE GOVERNOR'S SCHOOL @ INNOVATION PARK	\$283,976	\$744,782	\$1,850	\$1,030,608	\$1,189,766	\$0	\$1,189,766
Totals =	\$13,925,772	\$24,652,422	\$11,816,739	\$50,394,932	\$49,603,330	\$719,609	\$50,322,939

Footnotes:

1. Fiscal year 2015 revenue and expenditure data are shown since fiscal year 2016 data are not yet available.
2. Other/Misc. Revenues includes \$10,976,529 in annual local operating funds contribution from Fairfax County.
3. Several AYGS programs reported carryover funding from fiscal year 2015 for use in fiscal year 2016.

Review of AYGS Local Tuition Amounts and Existence of Foundations

Local tuition charged to school divisions participating in the AYGS programs is the largest source of revenue for the programs. About half of the programs have an associated private foundation that provides supplemental support and resources to the programs. Table 2 below summarizes the local tuition amounts charged per student for each program and whether the program has a private foundation providing supplemental support. Local tuition rates vary by program model, with tuition rates for full-day programs generally higher than the rates for shared-time programs. Programs in more rural areas or more virtual-based programs tend to have lower tuition rates. Local tuition rates range from \$0, where the participating divisions provide various costs in-kind, to a local share of \$16,075 per student based on each participating divisions' composite index. The local tuition rates for most shared-time programs fall in the range of \$3,000 to \$5,000, while the rates for most full-day programs are higher.

Ten AYGS programs have foundations or other mechanisms for external support of such items as research projects, field trips, technology, and extracurricular activities. Nine programs depend only on state and local funding allocations. Foundations provide a broad range of funding across programs, ranging from a few thousand dollars for materials/supplies, to \$30,000 for research and instructional field trips, to \$200,000 for various enrichment activities, competitions, athletics, and technology.

Table 2. Local Tuition and Foundation Information for Academic-Year Governor’s Schools Programs

<i>Program Name (Fiscal Agent Div.) (Program Classification)</i>	<i>Actual Enrollment 2016-2017</i>	<i>Local Tuition Amount per Student</i>	<i>Supporting Foundation?</i>
A. Linwood Holton Governor’s School (Washington County) (Shared-time 5/6)	147 (Fall only) 195 (Projected Spring)	\$500	No
Appomattox Regional Governor’s School (Chesterfield County) (Full-time)	374	\$6,794	Yes
Blue Ridge Governor’s School (Fluvanna County) (Shared-time 1/2)	560	\$0 tuition. However, school divisions pay salaries of teachers, classroom space, textbooks and school transportation. Three divisions (Orange, Goochland and Fluvanna) pay \$1,207 per student above their per-district allotted slots.	No
Central Virginia Governor’s School (Lynchburg City) (Shared-time 5/6)	131	\$4,617	Yes
Chesapeake Bay Governor’s School (Essex County) (Shared-time 5/6)	248	\$4,700	Yes
Commonwealth Governor’s School (Spotsylvania County) (Shared-time 1/2)	581	\$0 tuition. However, school divisions pay salaries of teachers, classroom space, textbooks and school transportation.	No
Governor’s School at Innovation Park (Prince William County) (Shared-time 5/6)	100	Prince William - \$4,813; Manassas City - \$4,690; Manassas Park - \$4,470	No
Governor’s School for the Arts (Norfolk City) (Full-time)	369	\$4,335	Yes
Governor’s School of Southside Virginia (Charlotte County) (Shared-time 5/6)	180	\$3,221.84 - for Humanities strand students. LEAs do not pay a tuition fee for the STEM strand students	No
Jackson River Governor’s School (Alleghany County) (Shared-time 1/2)	37	Alleghany - \$3,055.15; Bath - \$5,691.00; Botetourt - \$3,662.62; Buena Vista - \$3,556.85; Covington - \$3,662.62 (divisions pay an annual membership fee of \$3,000 regardless of the number of students)	No

VIRGINIA DEPARTMENT OF EDUCATION

<i>Program Name (Fiscal Agent Div.) (Program Classification)</i>	<i>Actual Enrollment 2016-2017</i>	<i>Local Tuition Amount per Student</i>	<i>Supporting Foundation?</i>
Maggie L. Walker Governor's School for Government and International Studies (Richmond City) (Full-time)	748	\$7,673	Yes
Massanutten Regional Governor's School (Shenandoah County) (Shared-time 5/6)	78	Per pupil rate - \$6,534.45 - divisions pay a different amount based on their composite index; Harrisonburg - \$4,424.11; Page - \$4,165.53; Rockingham - \$4,131.77; Shenandoah - \$4,426.87 but receives a reduced fee for building rental so actual per pupil cost is \$4,146.87	No
Mountain Vista Governor's School (Fauquier County) (Shared-time 5/6)	207	\$5,823	Yes
New Horizons Governor's School (Hampton City) (Shared-time 5/6)	170	For 169 students (three year average enrollment) divided by \$1,270,952 (total operational budget) = \$7,520 per student. Total operational budget minus projected state funding for 169 students= \$810,952; then divide by 169 students= \$4,798 per student	Yes
Piedmont Governor's School (Henry County) (Shared-time 5/6)	158	\$3,306	No
Roanoke Valley Governor's School (Roanoke City) (Shared-time 1/2)	267	\$4,650	Yes
Shenandoah Valley Governor's School (Augusta County) (Shared-time 5/6)	214	\$3,470	No (receives some funding from endowment though)
Southwest Virginia Governor's School (Pulaski County) (Shared-time 5/6)	114	\$3,650 tuition fee plus a utility fee of \$200 per student	Yes (but inactive for over 15 years)
Thomas Jefferson High School for Science and Technology (Fairfax County) (Full-time)	1,792	Without capital renovation fee for school year 2016-2017 is \$14,001 excluding transportation minus VDOE Governor's School contribution (variable due to LCI of participating school division). With capital renovation fee for school year 2016-2017 is \$16,075 excluding transportation, minus the VDOE Governor's School contribution (variable due to LCI of participating school division)	Yes
TOTAL Student Enrollment	6,670		

Proposed AYGS Funding Formula Options

As the 2016-2018 appropriation act language states that the AYGS program funding formula adopted in the 2016-2018 budget (i.e., state share of a 2.50 percent increase in the rebenchmarked per pupil funding amount and a \$50 per course per student amount) be effective only for fiscal years 2017 and 2018, several alternative AYGS funding formula options are proposed in this section.

Option 1: Provide Per Pupil Funding Based on SOQ Instructional and Support Cost Components; Uses Uniform Front-end Per Pupil Funding Amount for Most Costs

This option provides per pupil funding to AYGS programs based on instructional (using standards for high schools) and support cost components used in Standards of Quality funding. It is similar to the approach proposed in HB/SB 30 as introduced in December 2015; however, this approach establishes most of the per pupil funding values up-front, based on the per pupil unit cost of the standards, which are then applied to the enrollment of each AYGS program. Table 3 below illustrates the components included in the per pupil funding.

<u>2016-2018 Funded Salaries/Benefits Amounts for SOQ Instructional Positions:</u>	
Secondary Teacher Salary =	\$49,744
Sec. Asst. Principal Salary =	\$72,057
Secondary Principal Salary =	\$92,041
FY18 SOQ Instructional Fringe Benefit Add-on % (VRS, GL, Soc. Sec.) =	25.72%
SOQ Health Care Premium Per Position =	\$4,604
<u>SUPPORT Cost Component Based on Prevailing Support Per Pupil Amount:</u>	
Average Prevailing Per Pupil <u>Support Cost</u> from 2016-2018 SOQ Funding Formula =	\$2,099
<u>INSTRUCTIONAL Cost Component Based on SOQ Standards:</u>	
Per Pupil Cost of Secondary Teachers at 21:1 Ratio =	\$3,197
Per Pupil Cost of One High School Principal per Program (see below) =	<i>varies by program</i>
Per Pupil Cost of High School Asst. Principal at 1 per 600 =	\$159
Per Pupil Cost of High School Counselor at 1 per 350 =	\$192
Per Pupil Cost of High School Librarian per SOQ Standard (see below) =	<i>varies by program</i>
Per Pupil Cost for Funding All Programs (before Per Pupil for Principal & Librarian, Program Classification Weight, & Weighted Comp. Index Applied) =	\$5,647

This approach funds a statewide average support per pupil amount of \$2,099 that captures most support cost items contained in SOQ Basic Aid funding school divisions receive in the 2016-2018 budget. As in the HB/SB 30 proposal, several

support cost items are not included in this per pupil amount; specifically, the costs for pupil transportation, local school boards, and division superintendent.

The following five SOQ instructional positions are recognized for funding: Classroom Teacher, Principal, Assistant Principal, School Counselor, and Librarian, using the SOQ instructional standards for high schools. The SOQ funded salaries and fringe benefits rates and the standards used in calculating the instructional per pupil amounts are shown above in Table 3.

The per pupil amounts for teachers, assistant principal, and school counselor are constant across all programs and applied to the enrollment of each program. The standards for these positions are based on a 1 position per X student ratio so that the per pupil cost does not vary with program enrollment. Applying these per pupil amounts to enrollment allows partial positions against these standards to be funded.

However, the standards for principal and librarian do generate varying per pupil amounts depending on program enrollment since these standards are based on a fixed number of positions: a single position for principal, and 0.50 (up to 299 students), 1.0 (300 to 999 students), or 2.0 (1,000 or more students) positions for librarian. To incorporate these two standards, the per pupil amount will vary based on enrollment size. While these per pupil amounts vary, as shown in Table 4 below, their value is tied to funding these positions according to the standards based on the enrollment of each program.

As shown in Table 3, before application of the SOQ instructional Cost of Competing salary adjustment, program length weight, and composite index later in the formula, the single per pupil value that would be applied uniformly to all programs for the support cost component and teachers, principal, and school counselor is \$5,647.

As with the HB/SB 30 proposal, the current SOQ instructional Cost of Competing salary adjustment is applied to the per pupil amounts for the five instructional positions for AYGS programs in Northern Virginia whose fiscal agent school divisions are eligible for this salary adjustment (2.46 percent - partial rate - for certain Northern Virginia divisions outside of but near Planning District 8; 9.83 percent - full rate - for divisions in Planning District 8). Application of the instructional Cost of Competing rates increases the \$5,647 per pupil amount to \$5,729 (after partial rate adjustment) and \$5,974 (after full rate adjustment).

Table 4 below shows the per pupil funding amounts for each AYGS program used in the funding formula under this option. The \$5,647 amount (for support cost, teachers, assistant principal, and school counselor) is applied uniformly across all programs. The individual per pupil amounts for principal and librarian, as discussed above, vary based on program enrollment. The total per pupil amounts shown in the last column of the table reflect the three per pupil amounts added together.

Table 4. Per Pupil Funding Amounts by AYGS Program for Proposed Option #1

Governor's School	FY 2018 Projected Enrollment	PPA (Excl. Principal & Librarian)	Principal PPA	Librarian PPA	FY 2018 Total AYGS PPA
A. LINWOOD HOLTON GS	228	\$5,647	\$528	\$147	\$6,322
APPOMATTOX REGIONAL GS	380	\$5,647	\$317	\$177	\$6,140
BLUE RIDGE VIRTUAL GS	526	\$5,647	\$229	\$128	\$6,003
CENTRAL VIRGINIA GS	151	\$5,647	\$797	\$222	\$6,666
CHESAPEAKE BAY GS	253	\$5,647	\$476	\$133	\$6,255
COMMONWEALTH GS ¹	630	\$5,729	\$195	\$109	\$6,033
GOVERNOR'S SCHOOL FOR THE ARTS	355	\$5,647	\$339	\$189	\$6,175
GOVERNOR'S SCHOOL AT INNOVATION PARK ²	118	\$5,974	\$1,116	\$311	\$7,401
GOVERNOR'S SCHOOL OF SOUTHSIDE VIRGINIA	215	\$5,647	\$560	\$156	\$6,362
JACKSON RIVER GS	38	\$5,647	\$3,166	\$883	\$9,696
MAGGIE L. WALKER GS FOR GOV. & INT. STUDIES	748	\$5,647	\$161	\$90	\$5,897
MASSANUTTEN REGIONAL GS	76	\$5,647	\$1,583	\$442	\$7,672
MOUNTAIN VISTA GOVERNOR'S SCHOOL ¹	210	\$5,729	\$586	\$164	\$6,479
NEW HORIZONS GS FOR SCIENCE & TECHNOLOGY	171	\$5,647	\$704	\$196	\$6,547
PIEDMONT GS FOR MATHEMATICS SCIENCE & TECH.	158	\$5,647	\$762	\$212	\$6,621
ROANOKE VALLEY GS	270	\$5,647	\$446	\$124	\$6,217
SHENANDOAH VALLEY GS	225	\$5,647	\$535	\$149	\$6,331
SOUTHWEST VIRGINIA GS	120	\$5,647	\$1,003	\$280	\$6,929
THOMAS JEFFERSON HIGH SCHOOL ²	1,877	\$5,974	\$70	\$78	\$6,122

Footnotes:

1. Per pupil amounts reflect the Partial Instructional Cost of Competing salary adjustment of 2.46%.
2. Per pupil amounts reflect the Full Instructional Cost of Competing salary adjustment of 9.83%.

In this option, the program length weights of 0.50, 5/6th, and 1.0 are maintained consistent with the Program Classification of each AYGS program, as well as the weighted composite index for each program. The weighted composite index is the weighted (based on enrollment) average of the individual composite indices of the school divisions making up each AYGS program. In addition, the local per pupil funding maintenance of effort provision currently in the 2016-2018 budget could be maintained as part of this option.

The per pupil values under this option would be updated during each biennial “rebenchmarking” process for changes in the underlying cost components: standards, funded salaries, funded fringe benefits, and support costs. As the per pupil amounts reflect the SOQ funded fringe benefit rates, this option would provide formula funding for fringe benefits to AYGS programs as provided to school divisions through the SOQ funding formula.

Table 5 shows the program-by-program funding distributions in fiscal year 2018 for Option 1 compared to the funding distributions from the HB/SB 30 proposal and the funding formula in the current Chapter 780 budget. Note that the two percent Compensation Supplement funding is assumed to be removed in the funding distributions shown for Option 1. Also, the Option 1 funding for the Southwest Virginia Governor’s School reflects 5/6th-day funding as this program has returned to the 5/6 Program Classification.

As Option 1 results in an additional state cost over the current state funding level for AYGS programs, the formula could be phased-in over several fiscal years and partially funded as state revenues become available. The current funding formula approach adopted in the Chapter 780 budget for the 2016-2018 biennium could be maintained in future fiscal years until budgetary conditions may allow a transition to the Option 1 formula.

Table 5. Compare Fiscal and Distribution Impact of Three AYGS Program Funding Formula Approaches

Governor's School	Program Classification	FY 18 Enrollment	HB/SB 30 as Introduced (Dec. 2015)	Chapter 780 Budget	Proposed Option #1 (w/out 2% Comp. Suppl.)	Compare Proposed Option #1 to HB/SB 30 & Chapter 780	
			FY 2018 Payment	FY 2018 Payment	FY 2018 Payment	Compare to HB/SB 30	Compare to Ch. 780
A. LINWOOD HOLTON GS	5/6	228	867,421	743,124	879,203	11,782	136,079
APPOMATTOX REGIONAL GS	Full-Day	380	1,477,807	1,378,480	1,505,280	27,473	126,800
BLUE RIDGE VIRTUAL GS	1/2	526	790,425	723,457	805,337	14,912	81,880
CENTRAL VIRGINIA GS	5/6	151	553,524	460,975	564,007	10,483	103,032
CHESAPEAKE BAY GS	5/6	253	683,705	602,432	696,626	12,921	94,194
COMMONWEALTH GS	1/2	630	1,236,430	1,145,344	1,229,127	(7,303)	83,783
GOVERNOR'S SCHOOL FOR THE ARTS	Full-Day	355	1,393,976	1,236,060	1,420,621	26,645	184,561
GOVERNOR'S SCHOOL AT INNOVATION PARK	5/6	118	447,113	338,181	456,459	9,346	118,278
GOVERNOR'S SCHOOL OF SOUTHSIDE VA	5/6	215	791,092	708,029	806,107	15,015	98,078
JACKSON RIVER GS	1/2	38	132,472	73,505	134,943	2,471	61,438
MAGGIE L. WALKER GS FOR GOV. & INT. STUDIES	Full-Day	748	2,555,134	2,429,553	2,547,949	(7,185)	118,396
MASSANUTTEN REGIONAL GS	5/6	76	306,270	225,730	311,905	5,635	86,175
MOUNTAIN VISTA GOVERNOR'S SCHOOL	5/6	210	592,738	509,315	604,274	11,536	94,959
NEW HORIZONS GS FOR SCIENCE & TECH.	5/6	171	566,012	478,993	576,733	10,721	97,740
PIEDMONT GS FOR MATHEMATICS SCI. & TECH.	5/6	158	654,221	548,763	666,783	12,562	118,020
ROANOKE VALLEY GS	1/2	270	540,011	481,609	550,162	10,151	68,553
SHENANDOAH VALLEY GS	5/6	225	746,385	658,050	760,649	14,264	102,599
SW VA. GS (Option 1 reflects return to 5/6th program)	5/6	120	570,876	463,816	485,202	(85,674)	21,386
THOMAS JEFFERSON HIGH SCHOOL	Full-Day	1,877	3,597,743	3,402,290	3,734,183	136,440	331,893
TOTALS		6,749	\$ 18,503,355	\$ 16,607,706	\$ 18,735,550	\$232,195	\$2,127,844

Option 2: Provide Increased Support Per Pupil Funding to Full-time Programs

Recognizing the broader program and operational scope, higher per pupil operating cost and staffing, and lower percentage of funding support from state funds (relative to total operating costs) of the full-day AYGS programs, increase the support per pupil amount within Option 1 for the four full-day programs by 10 percent, from

\$2,099 to \$2,309. The projected state cost for this option is \$318,617 in fiscal year 2018. A 10 percent add-on balances recognition of the current costs and level of state funding support of the full-day programs with the increased state fiscal impact. This approach recognizes some of the differences in program scope, staffing, and operating costs between the shared-time and full-day programs without modifying the current program length weights or student enrollment used in the formula.

Option 3: Provide Textbook Per Pupil Funding to AYGS Programs

AYGS programs often require specialized textbooks and instructional materials, both hard-copy and digital, in providing their curricula and course offerings. Funding support in this area is cited as an on-going challenge for most programs. AYGS programs are not directly included in the Standards of Quality Textbooks funding distribution with school divisions; further, the appropriation act provides significant local flexibility on how the state Textbooks may be spent for instructional purposes.

The 2016-2018 budget provides the state share of \$109.78 per pupil in Average Daily Membership to school divisions under the Textbooks formula. The projected state cost in fiscal year 2018 to include AYGS programs in the Textbooks funding formula is \$328,669 (note: the program length weights of 0.50, 5/6th, and 1.0 are applied as part of this cost estimate). Alternatively, include budget language in the appropriation act requiring school divisions to pass through all or a portion of the per pupil state Textbooks funding that they receive for their students enrolled in AYGS programs (who are counted in the ADM of the resident school division).